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General Plan

230

Paradise

General Plan

1982-1992

**Collins Planning
and
Resource Analysis
Chico, California 95926**



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Section I

Initiating the General Plan Process

INITIATING THE GENERAL PLAN PROCESS

1.1 BACKGROUND TO THE GENERAL PLAN

Paradise has had a history of inconsistent, non-comprehensive and superficial planning for its population, environment and economy. Since Butte County gave little focused attention to the problems and future of the ridge environment, de facto local planning was performed by the local water delivery agencies. As the only local authority their policies in water services planning were most influential in land development decisions.

The Municipal Advisory Council of Paradise was the first attempt to bring local, popular organization to the needs of the fledgling community. It was under this MAC and a progressive group of citizens that the first local comprehensive planning studies and widespread citizen involvement in planning began.

Incorporation of the Town brought with it a responsibility for self-determination and the handling of local issues including land use and community management. As a general law jurisdiction, it also took on a requirement to comply with the body of State laws for planning, zoning and subdivision.

Chief among the laws are those Planning and Zoning laws under Section 65000 et. seq. of the California Government Code. They require that towns must prepare comprehensive, long range general plans for the development of their communities (65300) and that projects in the community must be consistent with those plans prior to approval.

By law, to ensure that significant local issues are studied, the plan must include treatment of land use, circulation, housing, conservation, open space, seismic safety, noise, scenic highways, and safety. The content of these is given in Government Code Section 65302.

1.2 PLAN STRUCTURE

The Paradise General Plan has been structured so as to group required elements into an issues format treating related kinds of topics under the same heading. The structure is similar to the approach recommended by the State Office of Planning and Research in General Plan Guidelines, 1980. The State OPR recommends grouping of elements under issue headings; Hazards, Natural

Resources, Aesthetic, Cultural and Recreational Resources, Community Development, Housing, and Infrastructure. The Paradise General Plan is structured in the following way:

- Natural Resources
- Natural Hazards
- Life Enrichment
 - Recreation
 - Senior Services
 - Cultural and Historical Resources
 - Archeology
- Environmental Quality
 - Aesthetics
 - Noise
 - Air Quality
 - Water Quality
- Housing
- Community Development
 - Demography
 - Land Use
 - Circulation
 - Water, Sewer, Drainage
 - Employment and Wages
- Regulatory Devices

Under the above outline, the General Plan includes three required planning presentations in one document: (1) plan studies, (2) goals, objectives, policies and programs, and (3) the project description and environmental setting required for the general plan environmental impact report as per the California Environmental Quality Act.

The planning studies include all the questions, research, analysis, and determinations that are necessary to identify and understand the problems of Paradise and isolate the trends and expected outcomes of the Town's present directions. These studies are presented straightforwardly in narrative, table, and graphic form and constitute the bulk of the Plan. Maps and tables are placed in the text immediately following reference to them. Appendices, referenced in the text, are placed at the end of the Plan.

The goals, objectives, policies and programs presentation, and recommendations of the Plan are incorporated within the appropriate sections of the Plan. For purposes of the Paradise General Plan, they are defined as follows:

- Goal: An ideal future condition, dealing with subjective values and expressed in abstract terms. These are constantly worked for, but never completely achieved.
- Objective: A measurable end which can be achieved. It is specific and an outcome which can be completed through systematic efforts.
- Policy: Statements or rules of judgement intended to guide decision-making. If these guidelines are adhered to, consistency in decisions will ensure attainment of Town objectives.
- Programs: Specific actions taken or laws passed which as tools help to execute policy and attain objectives.

Goals are presented at the beginning of almost every Plan discussion topic. They are a proposed condition and standard against which the following existing conditions and proposed directions should be measured. Objectives, policies, and programs follow immediately the appropriate discussion section. They are intended as directions, remedies or courses of action to the situation laid out in the text and toward the goal initially stated. Most plan issues and policies are related. To coordinate the issues, they are grouped by problem type but this in itself is not completely effective. Where there are similar issues raised in more than one area of the Plan, cross plan references are given.

1.3 PLANNING AREA AND PERIOD

The Paradise General Plan incorporates the study of two geographic areas. Broadly, it includes all the area which reasonably bears a social, economic, and environmental relationship to the Town. This area is included on the following Planning Area map and extends north to the DeSabra Reservoir south to the Lime Saddle area and east and west to the Little Butte Creek and Feather River canyons.

The Plan treats this area only generally in terms of physical environment and hazards, housing, and life enrichment, and more specifically under the topics of recreation and population.

More specifically, the General Plan treats the incorporated area of the Town of Paradise (broken line boundary). Most of the data and analysis, objectives, policies, and programs are very particular to the Town per se. They might be extended to adjacent areas in the case of annexation, with some updating and minor revision.

The planning period is 10 years, from 1982 until 1992. This period is the longest over which assumptions about past trends and existing conditions can reasonably be expected to continue. It would be difficult to assume that we know enough about any factor; population, traffic, business growth, etc. to forecast its change over a longer than 10 year period.

In planning for the future, the Town can be reasonably certain that conditions will be much the same in one or two years. But beyond that time, financial, social or environmental circumstances may change and forecasts will become increasingly inaccurate. A ten year forecast is an estimate or "best guess" which allows an assessment of the outcomes of community decisions that are likely within that time. It will be necessary to review and update forecasts every two to three years to assure that planning policies are appropriate and effective.

1.4 CITIZEN PARTICIPATION

One of the most important aspects of the planning process is citizen participation. Lessons learned through highway and public housing planning debacles in the 1950's and early 1960's proved that planning could only be carried on successfully and fairly if the people affected were involved in the design and implementation of the plan. Citizens became the critical foundation for public decision making which affected community welfare.

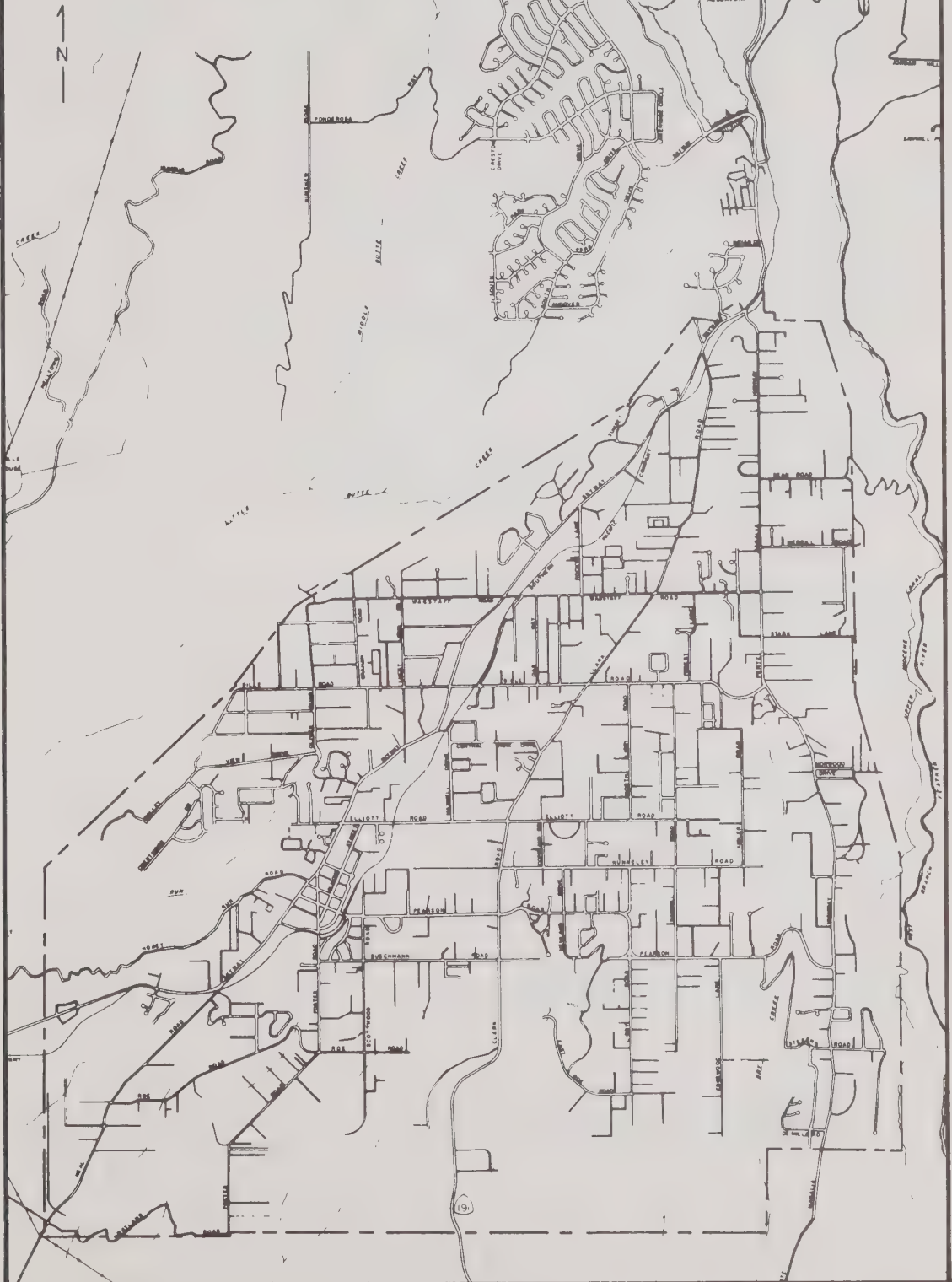
The result is that today the federal and most state governments require citizen input to decisions affecting the public. This occurs through the planning and environmental review processes in California. Citizen input is required in preparing the plan (Government Code Secs. 65033, 65304), in the hearing process prior to adoption (Secs. 65351, 65355), and following adoption (Sec. 65400(d)).

Citizen participation was the cornerstone to the preparation of the Paradise General Plan. An open, involved, and coordinated program of citizen input over the seven month planning period included over 160 persons directly, more than 1400 families indirectly, and exposed populations exceeding 80,000 to information, requests, and deliberations in the preparation of the Plan. Citizen participation activities that were carried on in Paradise were extensive. They are listed below:

1. Introductory public meetings to explain the planning process, the General Plan, and the role of citizen involvement.
2. Public meetings to identify issues and problems of the Town.

Town of PARADISE PLANNING AREA

0 2000 4000 6000 8000
Scale in Feet



3. Formation of the Citizen's Advisory Committee -- A steering committee constituted of the chairpersons of seven subcommittees including land use, housing, infrastructure, natural resources and hazards, recreation, senior services, cultural and historical resources, and aesthetics.

The steering committee held public discussions and heard progress reports from the consultant each two weeks throughout the planning period. Subcommittees, with total membership in excess of 135 persons, met every one or two weeks throughout the planning period. The committees initially worked to outline the substance of the chief issues facing the community in each subject area. The remaining major portion of time was devoted to drafting goals, objectives, and policies to be discussed, coordinated with other committees, and ratified for inclusion within the General Plan. Each committee placed representatives on other committees to ensure policy coordination.

4. A Citizen's Attitude Survey -- In March and April of 1981, the members of the CAC and other community volunteers administered a random telephone survey of more than 1,400 Paradise households. The survey was intended to solicit as wide a level of community involvement as possible in providing a base for setting community planning policy. In all cases of significant community feeling on an issue, goals, policies, and programs were structured to reflect those popular attitudes (See questionnaire and survey results in Appendix A).
5. A survey of business characteristics -- Somewhat later in the planning program a survey was conducted of a 25% sample of Town businesses. The purpose was to develop a stratified response to business related problems, growth, employment, and income (See questionnaire in Appendix B).
6. Media Coverage -- Throughout the planning program there was weekly newspaper and radio coverage of plan progress. Reports on meetings, published copies of questionnaires, and interviews were constantly presented to the public by the media. This increased public awareness and participation.
7. Coordination with Town agencies -- Throughout the planning process, Town agencies and organizations were represented or consulted with regard to their interests, policies, and reaction to the Town plan.
8. Public Addresses -- Many public addresses were given by the consultant to service organizations, clubs, political groups, and others during the planning program.
9. Presentations to Town Council and Planning Commission -- Monthly progress presentations were made to the Paradise Town Council and Planning Commission.
10. Field Trips -- Several field trips were conducted for the land use, housing, and other committees during the planning program to illustrate problems, explore alternatives, and generally clarify the issues being discussed in committee.

11. Workshops -- The consultant presented several workshops on regulatory devices. Workshops on zoning alternatives and other measures were held to increase citizen awareness of land use management techniques and directions.
12. Public hearings on the draft plan -- Two public hearings were held by the CAC to review the policy statements proposed for the General Plan. When the research for the Plan was completed and synthesized with the policy framework, a series of seven public meetings, hearings, and presentations were held at which elements of the draft plan were presented. The presentations and public review were done before subcommittees, the CAC, and the Town Planning Commission.

A synthesis of goals developed for each topic area in the Plan was written to express the overall goal of the General Plan. This goal reflects the attitudes of the citizens about their community. It should be a goal toward which community decisions and activities are directed.

1.5 GENERAL PLAN GOAL

To preserve Paradise's scenic, rural mountain environment, retaining the values of its tranquil and healthful forest ecology, its rural residential setting, agriculture, home and community business for its citizens, its visitors, and for future generations.

Section II

.

Natural Resources

NATURAL RESOURCES

GOAL: To ensure the prudent use, protection and identification of the natural resources of Paradise so that those natural resources might continue to serve a practical, aesthetic, scientific or cultural function.

To retain and maintain the scenic, wooded, and open character of the community of Paradise in order to ensure a rural quality of life and to minimize development in naturally hazardous areas and maximize the conservation of natural resources.

2.1 GEOLOGY

2.11 Topographic Setting

The Paradise area is located on the western flanks of the Cascade-Sierra Nevada system in eastern Butte County. The general elevation above sea level ranges between 1200 feet in the south to 2200 feet to the northwest at Magalia; however, the extremes of local relief actually range between about 1080 feet at the southwestern corner of Paradise and nearly 2320 at the northeastern margin of the Town. The area is gently sloping towards the southwest with average slopes around 4%, although steeper slopes occur to the west, adjacent to Butte Creek Canyon; to the east, along the margin of the canyon of the West Branch of the Feather River; and, in localized stream incisions such as Berry Canyon and Clear Creek to the south. Steep slopes and marked slope breaks are uncharacteristic of the central Paradise area and nearly 88% of the Town sits on slopes of less than 30% (Map II-I).

Paradise occupies a large southerly trending ridge which generally ranges about 1,000 feet higher than the intervening steep canyon walls. While some stream erosion has partially dissected the ridge surface, the overall aspect of this surface is one of generally rounded low hills and terrace-like low ridges. The major access roads to the community tend to follow the topographic grain; however, the network of intra-urban roads shows little evidence of topographic constraints.

The location of Paradise as well as its topographic setting is particularly significant in terms of both previous settlement patterns and future implications for development. The location between 1200-2200 feet along the western

foothills of the California Cascade-Sierra Nevada system places Paradise in a "foothill community" category which has attracted the attention of many people in California. In its locational setting, Paradise might be considered one of a string of foothill communities, including: Grass Valley, Nevada City, Auburn, and Placerville, which are presently showing growth above the state averages. Recent attention from the California Office of Planning and Research in addressing many of the planning issues in this foothill zone attests to both the growing importance of this region and the need to clearly evaluate the long term consequences of human land use patterns in this formerly sparsely populated region. This theme will arise frequently in the various systematic analyses in this plan.

2.12 Drainage (See Map II-2)

The drainage patterns of the Paradise area closely reflect the uniqueness of its location on a gently sloping ridge surface. Given the local topography and the dominant climatic pattern of Paradise, the drainage network is considerably different from that usually encountered in coastal or interior valleys, intermontane basins, or river canyons. The Paradise area is dominated by a somewhat continuous overland runoff flow which is organized into local rills or depressions as the runoff is collected. There is localized erosion and siltation in these depressions or swales related to slope and topography; however, the bulk of the runoff is shunted downslope to become runoff in lower stream systems.

The Paradise area is divided into fairly distinct drainage basins which have been shown to share common characteristics (McCain Associates, 1980). The drainage basins serve to collect the upslope surface runoff and direct it downslope; however, in these local drainage swales, the flow is intermittent and only lasts briefly following rainfall. Due to the lack of a continuous flow, the characteristics of a system of active stream erosion have not developed atop the ridge surface. The system should be considered as a network of drainage basins which collect runoff waters and direct it into downslope stream courses rather than a well-developed stream network effectively draining the ridge surface.

The drainage basins share certain characteristics, including width, size, and bottom configurations. Since their depth of incisement is very shallow, usually less than one meter, these drainage swales lack adequate capacity to convey runoff waters from lengthy storm activity during the winter months.

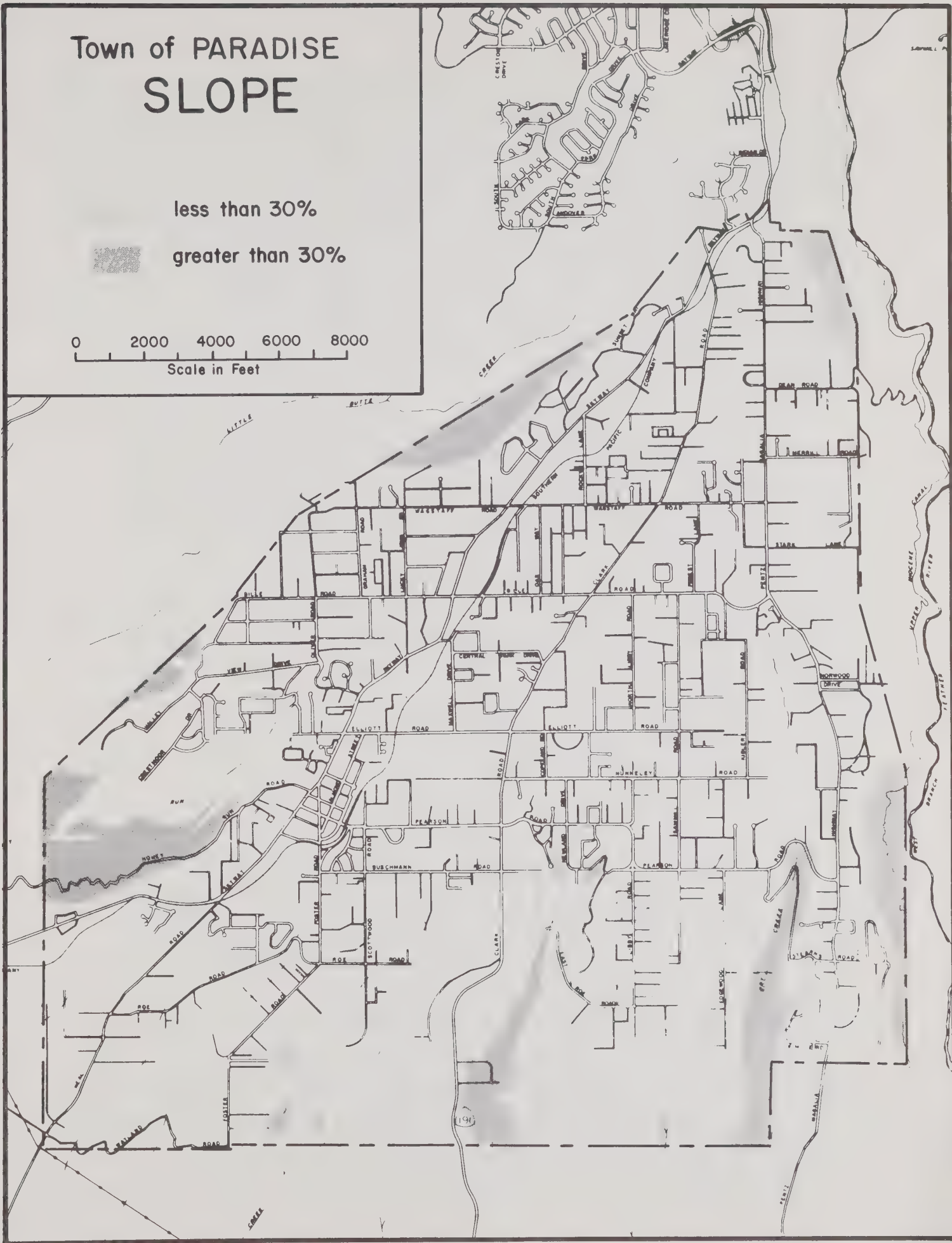
Town of PARADISE SLOPE

less than 30%



greater than 30%

0 2000 4000 6000 8000
Scale in Feet



Since the drainage basins are long and narrow, averaging one-fourth to one-half miles wide and four to five miles long, localized flooding may occur at various points. Downslope, these drainage systems have become incised into the basement volcanic rocks and have developed steeper sides and more clearly defined channels. Many of these channels carry a perennial runoff flow.

The drainage systems often coincide with groundwater seeps and springs which serve to increase the moisture availability beyond the intermittent flows directly related to storm runoff. Consequently, the drainage depressions and their downslope channels are often thickly vegetated with riparian species of vines, bushes, and trees. Both the flow and the riparian vegetation patterns have been inducements to settlement.

As these areas are developed, often the undergrowth and grass cover is removed and channels are randomly excavated to suit the individual owners or developers interest. Often when this takes place, either through lack of knowledge, lack of funds, or indifference, the resulting channel is inadequate in capacity and poses a real possibility of promoting damage (McCain Associates, 1980, p.6).

While the soils and subsoils of the Paradise area do not markedly aggravate the runoff situation, neither do they serve to be highly permeable. The consequence is often localized flooding which can be exacerbated by such land use activities as grading operations, vegetation clearance, inattention to storm runoff from construction sites during the peak winter rainfall period, large-scale paving, and the lack of a collection system for storm waters. Storm runoff arrives at the principal drainage channels through overland flow for most of the Paradise area. Very few collector systems have been constructed, and the primary form of collection has been through roadside ditches.

The major public roads running north and south are situated along ridges between basins and carry runoff southerly until intercepted by east-west roads. The roadside ditches along these roadways tend to get quite deep and create maintenance problems for county road crews and a somewhat unsightly and dangerous condition for motorists and pedestrians (McCain Associates, 1980, p.8).

The three-fold drainage situation of primary overland flow from storm runoff, the inefficiency of local drainage depressions and roadside ditches to carry the intermediate flow, and the aggravation of runoff efficiency by human activities has created a somewhat difficult condition for the management of present storm runoff as well as implications for future development projects which could create further flooding difficulties. The proposed policies and programs relating to the erosion hazard and the flooding hazard have been

developed in order to deal with this situation. Implicit within these policies is the recognition of the uniqueness of the natural drainage system of the Paradise area; the awareness that present channels may easily be modified to become even more inadequate in capacity to channel runoff, thereby leading to local flooding and property damage; and, the conclusion that the bulk of present storm runoff and flooding problems are human-induced and the result of landowners causing largely inadvertent damage to the property of other landowners by their largely unregulated activities. Localized flooding as a consequence of the lack of long-term planning has been an often mentioned concern of residents of Paradise at public meetings. A Citizen Attitude Survey conducted in March, 1981, indicates that residents were concerned with erosion and flood hazards and were in favor of regulatory control (See Appendix A).

2.13 Geology (See Map II-2)

The basic geology of the Paradise area reflects its intermediate position between the Cascade Province to the north and the Sierra Nevada Province to the south. The Cascade system is mainly composed of Cenozoic volcanic rocks, while the Sierra Nevada system is characterized by a massive intrusion of Mesozoic granitics into various layers of overlying rocks. The majority of the Paradise area is underlain by Pliocene volcanics with pyroclastic volcanics of the Tuscan Formation dominating the southern, western, and north-central portions and andesitic volcanics underlying the eastern and extreme northern portions of the region. These Pliocene volcanics are several hundred feet in thickness and have been deeply trenched by the erosional activities of Butte Creek and the West Branch of the Feather River lying to the west and east respectively of Paradise. The volcanics lie atop layers of older metamorphic rocks and these have been locally exposed in the northern part of the Paradise area. In the extreme northwestern part of Paradise, there is a narrow, arcuate extension of Pre-Cretaceous metamorphic rocks with small out-croppings of Mesozoic ultra-basic intrusives. The coincidence of these two localized formations with the Pliocene volcanics provides considerable complexity to the local soil types of the northern Paradise-Magalia region.

The Paradise area occupies the western flank of the Sierra Nevada system which is characterized as a westward downtilted fault block which underwent massive uplift during the Cretaceous Period. Subsequent erosion of this block along with the adjacent thick volcanics of the Cascade system has created canyons

and auriferous channels caused by erosional processes removing metallic gold from the metamorphic rocks and depositing it in gravelly stream beds. The gold mining ventures of the Paradise-Cherokee-Oroville district correspond to the mining of these auriferous gravels. These stream beds and surrounding areas were covered by the later volcanic outpourings during the Pliocene, and then exhumed somewhat by the more recent erosional activities of such streams as the Feather River, Butte Creek, and Chico Creek. These recent channels frequently intersect older stream channels lying atop the metamorphic formations. These processes, along with landslide and mudflow activities, have formed the present geological foundation of the Paradise area which includes adesitic and pyroclastic volcanic rocks, foliated metamorphic rocks, old auriferous channels, and recently excavated deposits of sands and gravels. Other than the localized, and heavily worked, gold-bearing gravels, the Paradise region is not presently characterized has a heavily mineralized zone. There are no current mining operations in Paradise and the past gold mining period has ended, leaving several abandoned gold mines, including the Bader Mine in the extreme northwest, on the periphery of Paradise.

2.14 Soils

The Paradise area is comprised of a basic uniformity of soil types, a condition which corresponds to the general geological and overall topographical setting. In this treatment of soils, the region analyzed covers both the Town of Paradise and adjacent Magalia area. This region contains eight different soil series of which one, Aiken Clay Loam is predominant, and covers approximately two-thirds of the total area (Map II-3 and Table II-1). The majority of the settlement of the Paradise-Magalia area has been developed upon Aiken Clay Loam. This soil type as well as the other seven have been broadly characterized as granular, moderately deep, with moderate permeability, good drainage characteristics, and with medium suitability for timber production (Table II-2).

The Butte County General Plan (1977) has mapped the Paradise area as a region with "generally low" potential for the liquefaction of granular sediments, and also as a region with "moderate" quantities of expansive soils (based upon the shrink-swell potential of the soil). As well, these soils are considered to be of only "slight" erosion potential with "low" subsidence and landslide potential. While such categories might approximate the overall Paradise area,

actual soil behavior conditions are heavily affected by localized patterns of slope, vegetation, degree of regolith movement, drainage, and soil moisture content.

Aiken Clay Loam ranges from one to five feet in depth containing varying amounts of stones and other clasts. Like all of the soils of the Paradise region, its surface and subsoil reactivity is moderately acidic (Table II-1). The parent material for this soil type is basic volcanic rock with some metamorphic layers encountered at depths of 12-25 feet. This pattern is similar to that of the other soil types. Dispersed throughout all of the soil horizons of the Aiken Clay Loam are hard, massive boulders of andesite which have weathered from the original pyroclastic material (Montgomery, 1979).

The southern one-third of the Paradise area is comprised of irregular patches of two very similar soil types, the Pentz Sandy Loam and the Toomes Gravelly Loam. These two soils are also derived from basic volcanic rocks and have moderate depths of 1-2½ feet. To the northeast, a small patch of Cohasset Clay Loam occupies the upper portion of the Dry Creek Basin west of the Pentz-Magalia Highway. A similar deposit of this soil series is also located along the northeastern boundary of Paradise between the Skyway and the Town limits. The Cohasset Clay Loam ranges to a depth of five feet and like the Toomes-Pentz series, is generally well-drained and has moderate permeability. (See Map II-4)

Localized pockets of four additional soil types distributed in extreme northern Paradise and adjoining Magalia are the McCarthy Sandy Loam, the Mariposa Stony Loam, and the Boomer Gravelly Loam. All of these soils range in thickness from 2 to 4 feet and are generally well-drained. They are relatively minor in terms of areal extent and the degree of past development upon them. The last soil type, the Supan Loamy Clay is located in an arcuate pattern along the central eastern margins of the Town south of Merrill Road and east of the Pentz-Magalia Highway. This soil type is unique in having been derived from secondary volcanic landslide-mudflow parent materials; however, in its basic physical characteristics and drainage permeability behavior, it closely resembles the other soil types of the Paradise area.

There has been some alluviation in the various drainage depressions and rill networks atop the main ridge. In these drainage systems, pockets of silty clay residual soils have formed a somewhat impervious alluvial layer. This condition, while not extensive, has served in a minor way to decrease channel percolation and to increase the potential for flooding along these drainage

Town of PARADISE GEOLOGY/DRAINAGE

Pv^a Pliocene volcanic-andesite

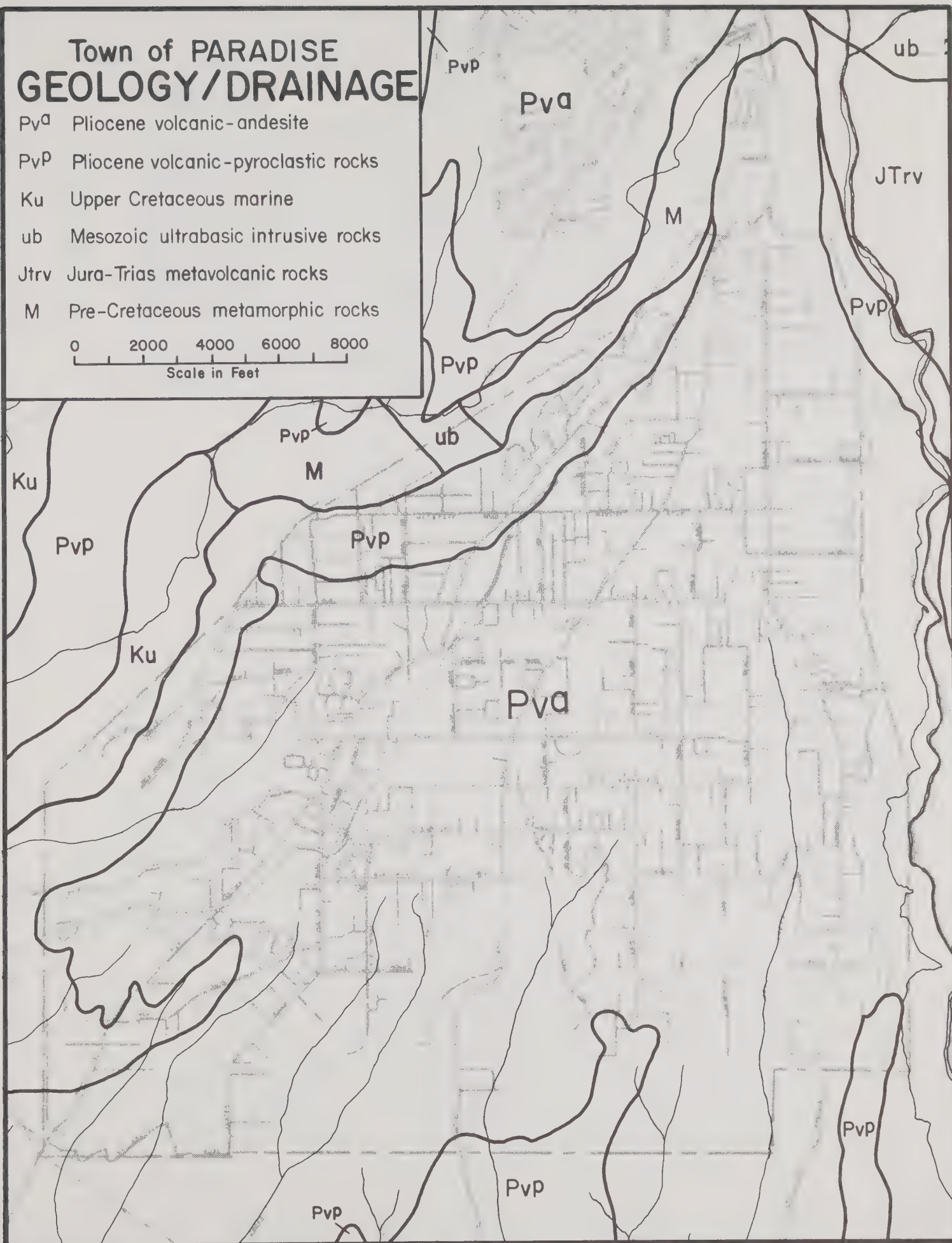
Pv^p Pliocene volcanic-pyroclastic rocks

Ku Upper Cretaceous marine

ub Mesozoic ultrabasic intrusive rocks

Jtrv Jura-Trias metavolcanic rocks

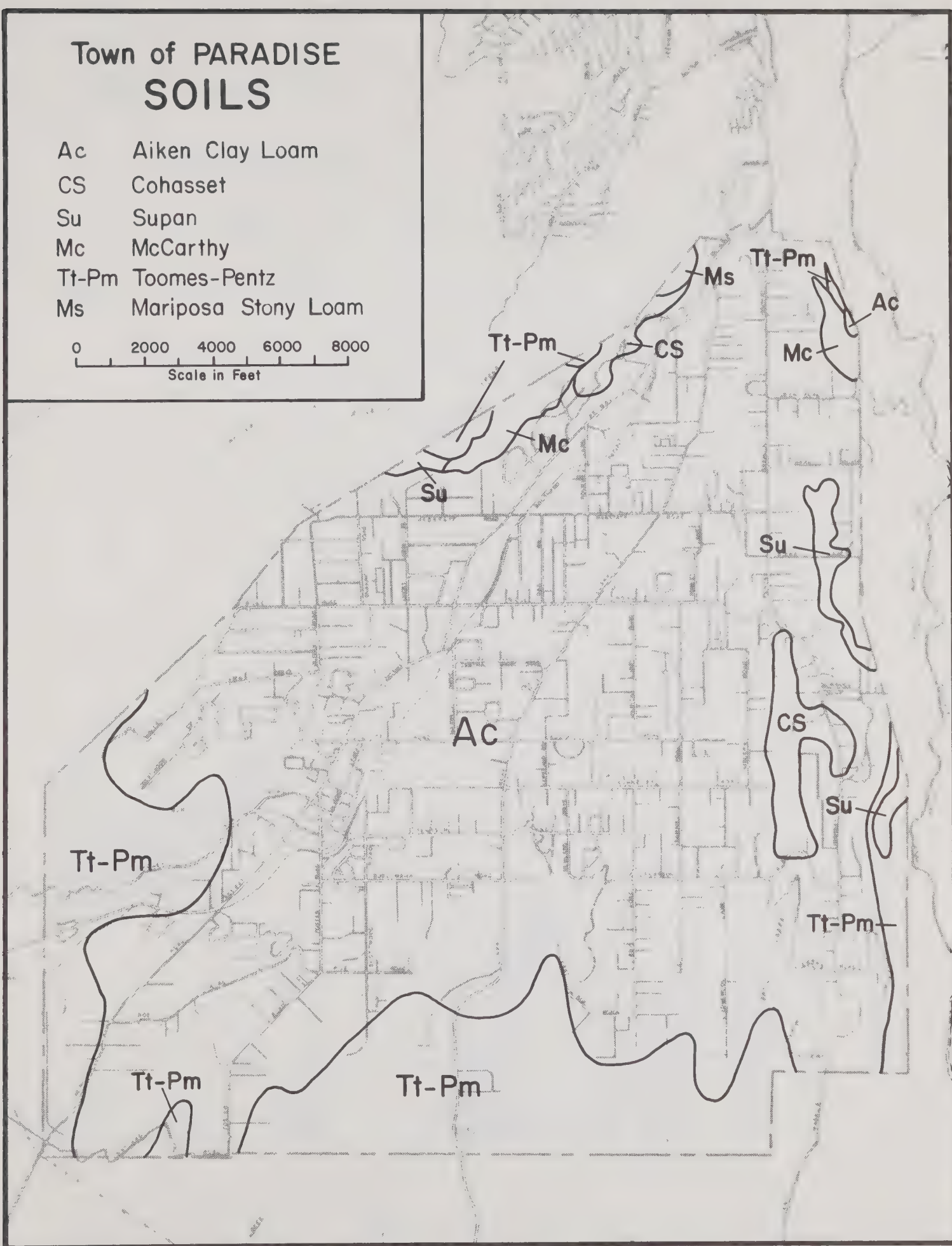
M Pre-Cretaceous metamorphic rocks



Town of PARADISE SOILS

Ac Aiken Clay Loam
CS Cohasset
Su Supan
Mc McCarthy
Tt-Pm Toomes-Pentz
Ms Mariposa Stony Loam

0 2000 4000 6000 8000
Scale in Feet



Town of PARADISE SOIL DEPTH

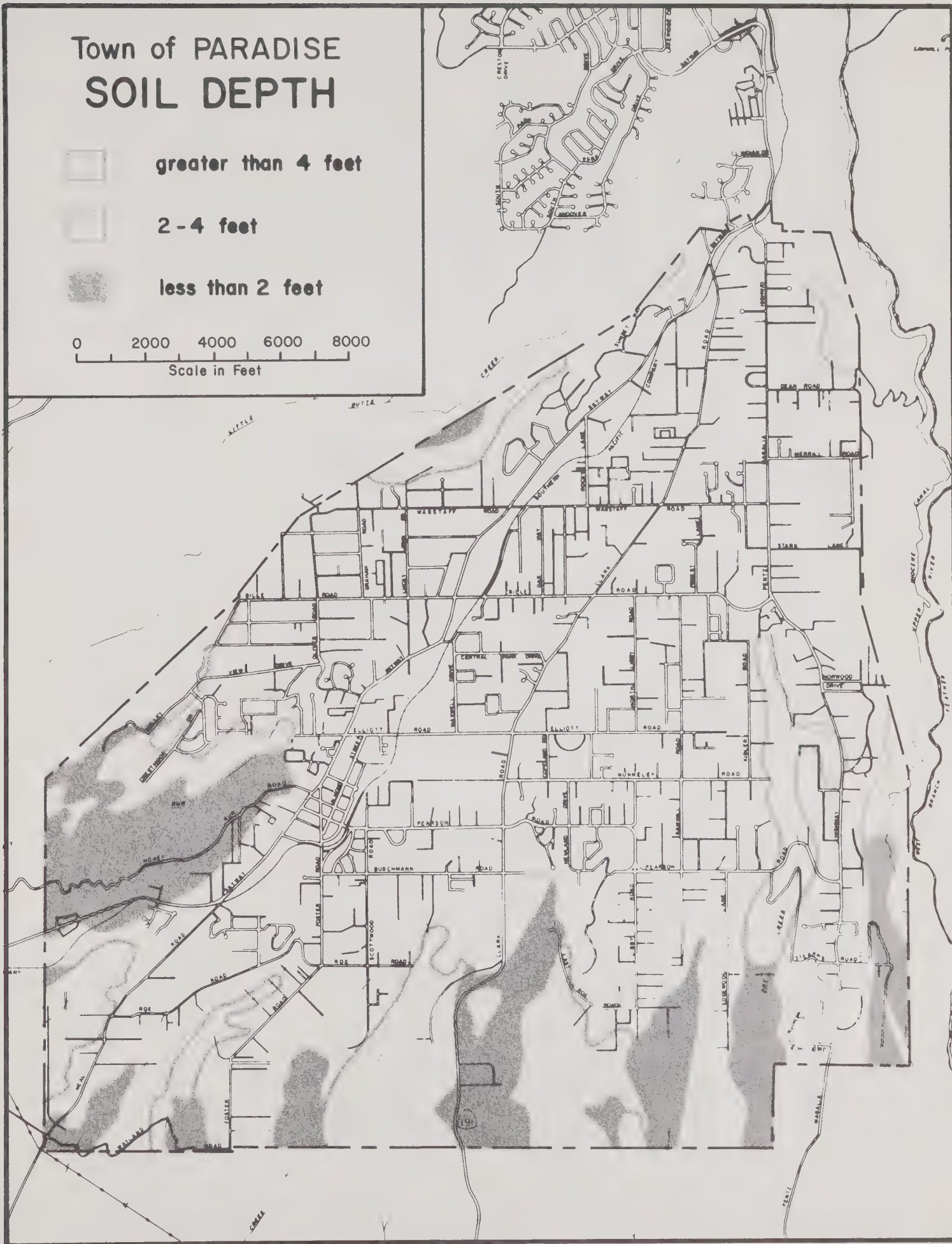
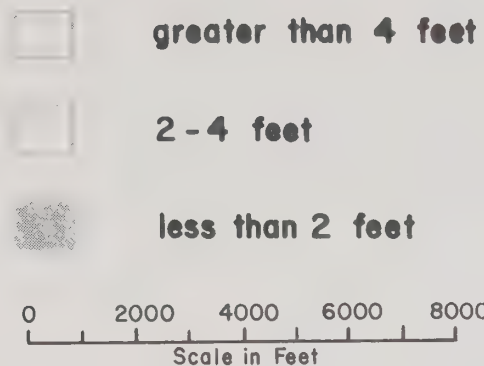


Table II-1

SOIL TYPES OF THE PARADISE AREA

<u>Series Name</u>	<u>Total Areal Coverage</u>	<u>Depth Range (inches)</u>	<u>Texture of Surface/Subsoil</u>	<u>Parent Material</u>	<u>Reaction of Surface/Subsoil</u>
AIKEN	67%	60+	Loam/ Clay	Basic Volcanic Rock	Moderately Acidic/ Strongly Acidic
TOOMES	15%	4-20	Gravelly Loam/ Gravelly Loam	Volcanic Breccia	Slightly Acidic/ Neutral
PENTZ	5%	8-20	Sandy Loam/ Sandy Loam	Andesitic Tuff	Slightly Acidic/ Slightly Acidic
McCARTHY	4%	20-40	Cobbly Sandy Loam/ Cobbly Sandy Loam	Basic Volcanic Rock	Slightly Acidic/ Moderately Acidic
COHASSET	4%	40-60	Loam/ Clay Loam	Basic Volcanic Rock	Slightly Acidic Strongly Acidic
MARIPOSA	2%	20-40	Gravelly Loam/ Gravelly Heavy Silt Loam	Meta- Sedimentary Rock	Moderately Acidic/ Strongly Acidic
SUPAN	2%	20-40	Loam/ Clay	Basic Volcanic Mudflow	Slightly Acidic/ Neutral
BOOMER	1%	40-60	Gravelly Loam/ Gravelly Clay Loam	Meta- Volcanic Rock	Moderately Acidic/ Moderately Acidic

Source: Mallory, J.I. & B. Smith, Soil-Vegetation Survey, Paradise 7.5 minute Quadrangle and Cherokee 7.5 minute Quadrangle, Butte County, California, California Dept. of Forestry, 1980.

Table II-2

SELECTED BEHAVIOR CHARACTERISTICS OF THE SOIL TYPES
OF THE PARADISE AREA

<u>Soil Series</u>	<u>Permeability</u>	<u>Drainage</u>	<u>Hazard</u>	<u>Estimated Timber Production</u>	<u>Suitabilities For Extensive Range Use</u>
AIKEN	Moderately Slow	Well	Moderate	Medium	Medium
TOOMES	Moderate	Well	Slight	Unsuited	Low
PENTZ	Moderate to Moderately Rapid	Well to Excessive	Slight	Unsuited	High
MCCARTHY	Moderately Rapid	Well	Slight	Low to Medium	Medium
COHASSET	Moderate	Well	Moderate	Medium to High	Medium
MARIPOSA	Moderate	Well	Moderate	Low to Medium	Low
SUPAN	Moderately Slow	Well	Moderate	Unsuited	Medium
BOOMER	Moderate	Well	Moderate	Low	Low

Source: Mallory, J.I. and B. Smith, Soil-Vegetation Survey, Paradise 7.5 minute Quadrangle and Cherokee 7.5 minute Quadrangel, Butte County, California, California Department of Forestry, 1980.

courses. Other than these small pockets of shallow alluviation, the Paradise-Magalia area is notable for its lack of soil types derived from recent alluvial deposition.

2.2 CLIMATE

The climate of Paradise may be characterized as an inland Mediterranean climatic types. This climate has warm to hot summers and mild to cool winters with a distinctive winter precipitation regime. The long, dry summer period is somewhat unique to the Mediterranean climate yet is a feature shared commonly with most of California. The winter period is characterized by the passage of mid-latitude cyclonic storms passing westward from the North Pacific Ocean and bringing moist, unstable air masses into interior Northern California. The actual number of storm centers of low pressure is quite different from year to year and this variability is the primary determinant of precipitation variability from one year to another.

Since those storm systems are basically passing along the North American Polar Front under the influence of a strong westerly wind movement, their passage during winter is a time of considerable air mass interaction. Cold, dry air may flow southward across the Sierran plateau country of Northeastern California both during and immediately after the passage of the storm centers. Additionally, a strong southerly flow brings moist, unstable maritime air into the Paradise region from the Pacific Ocean by way of the San Francisco Bay and Sacramento River Valley topographic corridors. This unstable air brings periods of overcast conditions accompanied by drizzly weather and cooler temperatures which can last for several days. Fluctuations (north-south perturbations) in the mid-latitude and subtropical jet streams have been noted to have some effect upon the trajectories of these storm systems as they pass across Northern California.

Precipitation from these storms increases from west to east, with lower totals in the Sacramento Valley and western Sierran foothills, to much higher totals at higher elevations on the western side of the summit. Reflective of this pattern, most stations such as Chico and Oroville receive between 25-30 inches of precipitation annually; stations such as Paradise, Forest Ranch, and Grass Valley receive between 45-50 inches; and upland stations such as DeSabra, Brush Creek, and Strawberry Valley receive between 60-70 inches per year. Table II-3 shows the annual precipitation totals for

Paradise (49.67 inches) at an elevation of 1750 feet above sea level, and for DeSabra (63.93 inches) at an elevation of 2563 feet. The mean annual precipitation has been variously reported for Paradise (Table II-4).

In general the winter months are cool, overcast and periodically dominated by moist maritime air masses whose passage across Northern California as storm systems is made increasingly more unstable by orographic lifting. Freezes can occur within Paradise at any time between late October and late April; however, prolonged periods of freezing temperatures are rare. Absolute minima of 10.8 F. and 9.0 F. have been recorded during January for Paradise and DeSabra respectively. Snowfall frequently occurs during mid to late winter in Paradise. It usually does not remain on the ground long, often melting within 36 hours. The periods of snowfall, snow depth, and low winter temperatures are all climatological features which change rapidly within short distances of Paradise as one moves atop the Sierran surface.

During the winter months the Sierran Plateau is dominated by higher pressure as a consequence of the chilling effect of altitude coupled with a snowpack covering the surface. Cooler air tends to settle into basins and valley bottoms where radiational cooling during relatively calm, clear winter nights can lead to low temperatures. On other occasions, radiational cooling can lead to the formation of thick fog which tends to blanket the Sierran foothills. The lower winter temperatures are also primarily responsible for the low evapotranspiration (evaporation) rates during November-April, when about 25% of the annual evaporation rate of 53.6 inches occurs during half of the year.

The summer months are usually quite dry with less than 4% of the annual precipitation arriving in the five month period of May-September. By mid-summer, the Sacramento Valley is usually occupied by an elongated thermal low pressure due to intense heating of the land surface. The retreat northward of the Polar Front is accompanied by the domination of Northern California by massive subsidence from the eastern margins of the North Pacific high pressure system. Warm, dry, subsiding air masses now dominate the Paradise region bringing low relative humidities and absolute maxima such as 115 F. at Oroville, 104 F. at DeSabra, and 110 F. at Paradise. The period of mid-June to late September is coincidentally the peak season of fire hazard in terms of optimal "fire weather" conditions; strong northwesterly winds, low relative humidities, low soil moisture, dry brush, grass and timber; high air temperatures; and suitable ignition conditions and temperatures. The summer drought is not alleviated by the sporadic summer convective thunderstorms which

Table II-3

ANNUAL PRECIPITATION TOTALS
FOR PARADISE AND DESABLA, 1958-1977

YEAR	STATIONS	
	<u>PARADISE</u> [*]	<u>DESABLA</u> ^{**}
1958	56.10	80.37
1959	30.73	45.45
1960	51.54	71.66
1961	40.37	52.82
1962	61.14	76.36
1963	48.91	61.99
1964	47.82	69.36
1965	44.63	60.02
1966	45.00	52.22
1967	51.76	66.81
1968	52.59	64.42
1969	76.43	86.26
1970	71.43	89.99
1971	27.61	41.02
1972	41.01	52.29
1973	82.84	106.82
1974	59.11	67.01
1975	50.84	63.31
1976	18.47	22.66
<u>1977</u>	<u>35.09</u>	<u>47.76</u>
Average Annual Precipitation:	49.67	63.93

* Station Elevation 1750'

** Station Elevation 2563'

Source: California Climatological Data, Annual Summaries, 1958-1977,
U.S. Department of Commerce, N.O.A.A.

Table II-4

CLIMATOLOGICAL DATA SUMMARY
PARADISE, CALIFORNIA

<u>MONTH</u>	<u>AVERAGE TEMPERATURE (°F.)</u>	<u>AVERAGE PRECIPITATION (In.)</u>	<u>AVERAGE EVAPORATION (In.)</u>
January	43.7	9.3	0.7
February	46.6	15.7	0.8
March	49.7	13.3	3.4
April	52.8	4.8	4.4
May	63.2	0.3	7.0
June	71.9	0.2	8.1
July	75.0	0.3	10.2
August	76.4	0.0	9.1
September	74.9	0.0	5.4
October	65.3	2.7	3.4
November	51.0	2.5	1.1
December	44.0	7.2	0.0
<u>ANNUAL</u>	59.5	56.3	53.6

Source:

California Climatological Data, U.S. Department of Commerce, National Oceanic and Atmospheric Administration. Cited in Montgomery, "Water Quality Management Plan for Paradise and Magalia", March 1979, p.2-4.

bring sporadic and unreliable amounts of warm season moisture and the danger of lightning-set wildfires to the Paradise region.

The moisture input system of Paradise can climatologically be characterized as one of seasonal drought. This seasonal drought can be extended to a longer term cyclical drought during periods of lower than average annual precipitation. The long term record shows that wide departures from the mean are uncharacteristic for Paradise. During the twenty-year period from 1958-1979, the annual totals were within 20% of the mean or higher than the mean during 16 of those years. However, a high of 83 inches was recorded in 1973 and a low of 18.5 inches was recorded for 1976. The overall planning for drought amelioration and the degree to which seasonal and possible cyclical droughts inter-relate to land use policies needs to be analyzed more fully.

Policy

Work to lessen drought hazard through increasing available information relevant to minimizing drought impact.

2.3 VEGETATION (See Map II-5)

The vegetation cover of the Paradise area might be characterized as a broad transition zone (ecotone) between the plant formations of the Sacramento River Valley and the montane communities of the Sierra Nevada-Cascade system. This transitional character of the vegetation is consistent with the foothill location of Paradise and is the primary determinant for the varied and complex nature of the plant communities. The altitude of Paradise, roughly 1200 to 2200 feet above sea level, represents the general zone along the western Sierran foothills of Northern California where a lower blue oak-digger pine/chaparral woodland association gives way to an association of tall forest trees dominated by yellow pines downslope and other conifers (e.g. Douglas fir) upslope. As mentioned earlier, this zone was and is increasingly becoming an attractive region for foothill settlement in Northern California. It is thus possible to discuss a series of common ecological conditions that relate to planning considerations for many widespread communities of California's Sierran foothill belt. In this regard, Paradise shares many environmental patterns with similar communities in central and northern California. Consideration of vegetational distribution and the wildland fire hazard are certainly two of these common patterns.

In broadest outline, the following four vegetation communities occur intermixed within the Paradise transition zone:

2.31 The Foothill Woodland

The foothill woodland extends across the extreme southern portions of the Town and dominates the ridge surfaces to elevations of 1300 feet in elevation. The primary floral elements of this woodland are blue oak, interior live oak, and digger pine. Above 1500 feet these species give way to canyon live oak (golden oak), tan-bark oak, and the characteristic oak species of the higher coniferous forests, black oak. Several species of shrubs provide an understory to this open woodland. Prominent in this regard are several species of manzanita (see Table II-5), several species of Ceanothus, as well as chamise, yera santa, poison oak, and several members of the Rose Family (e.g. the genera Prunus, Ribes, and Rosa).

2.32 The Chaparral

The Chaparral, or sclerophyllous woodland, is an association of tall, evergreen, woody shrubs which dominate many sites within the Paradise region that are open and dry, or are in various stages of a post-burn succession. Although characterized as a brushland, chaparral formations are often interspersed with grasses and scattered trees, and individual species intergrade with the other three vegetation communities. The chaparral communities are often composed of locally dominant species of shrubs and admixtures of many others. The main dominants in the Paradise area are chamise, toyon, several manzanitas, members of the genus Ceanothus (deerbrush and others), bitter cherry, scrub oak, rudbud, yerba santa, and mountain mahogany. Chaparral formations occur most prominently on the slopes adjacent to the canyons of Butte Creek and the West Branch of the Feather River; the ridge surfaces and valley sides in south Paradise; and, in areas which have been cleared, heavily logged, and/or recently burned. In Paradise, many thick aggregations of chaparral occur near human habitations and other facilities.

2.33 The Riparian Associations

The riparian associations occur as narrow ribbons of dense brushy species and trees along the water courses of south Paradise and around the localized drainage basins to the north. The dominant riparian trees are willows, white alder, sycamore, cottonwood, the California bay (laurel) tree, maple, aspen, birch, and western dogwood. Prominent as understory and vine-like plants are poison oak, California wild grape, wild blackberry, and elderberry. This

Town of PARADISE VEGETATION

Vegetation Associations

C Chaparral

O-Dp Oak-Digger Pine Forest

Pp Ponderosa Pine Forest

Mf Mixed Forest

U Urban (cleared)

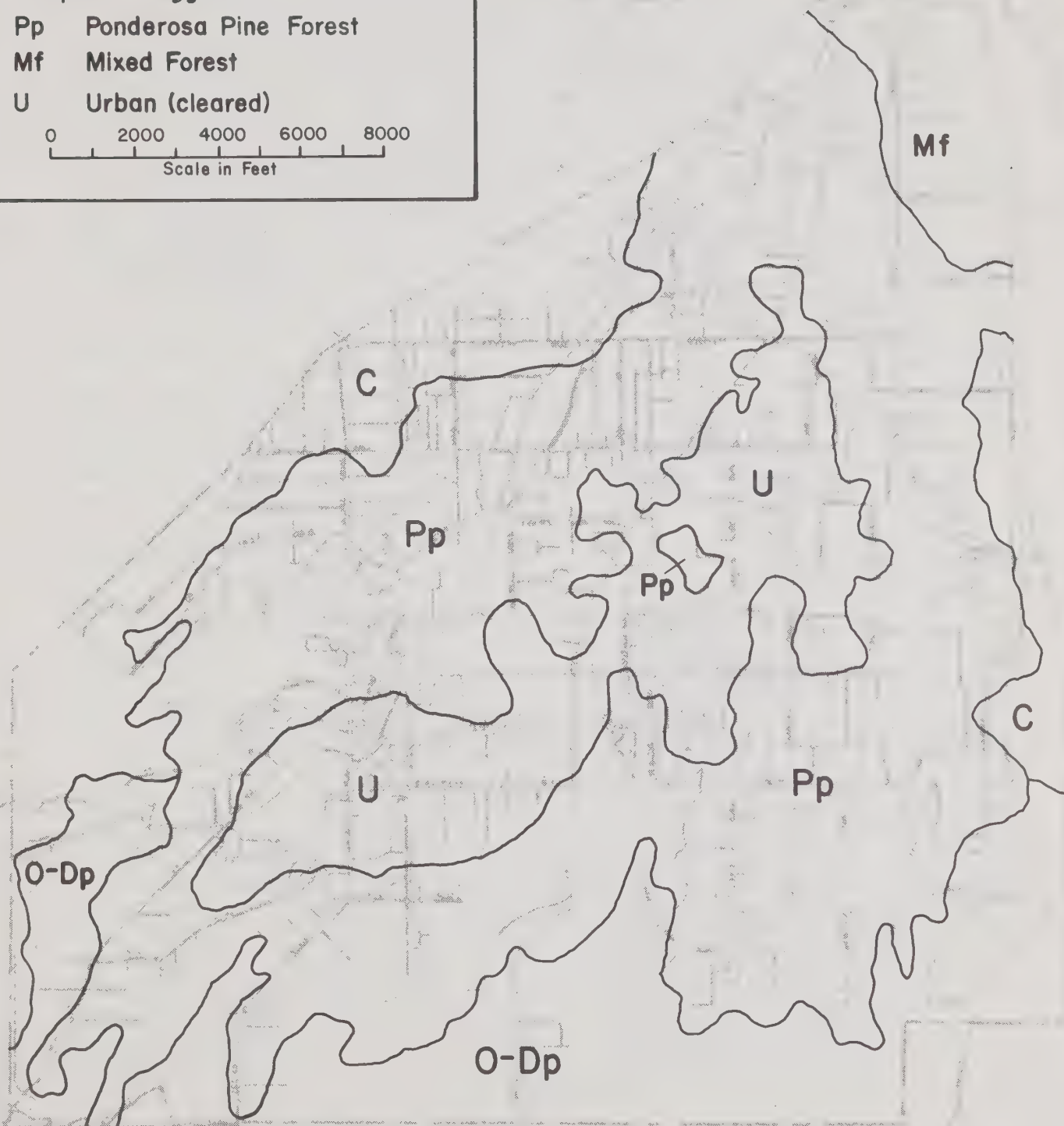
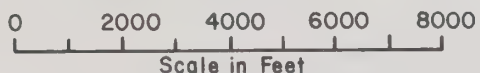


Table II-5

COMMON PLANT SPECIES OF THE PARADISE AREACommon NameScientific NameANNUAL GRASSES

Foxtail fescue

Festuca megalura

Red brome

Bromus rubens

Slender wild oats

Avena barbata

Spanish brome

Bromus madritensisPERENNIAL GRASSES AND GRASS-LIKE PLANTS

Lemmon stipa

Stipa lemmonii

Parish wheatgrass

Agropyron parishii laeve

Perennial bluegrass

Poa species

Many-stem sedge

Carex multicaulisANNUAL FORBS

Common dwarf flax

Hesperolinon micranthum

Little tarweed

Madia exigua

Slender annual fireweed

Epilobium minutum

Small-flower lotus

Lotus micranthus

Yellow star thistle

Centaurea solstitialisPERENNIAL FORBS

Aster

Aster species

Blue dicks; wild hyacinth

Dichelostemma pulchellum

Bolander galium

Galum bolanderi

Bracken fern

Pteridium aquilinum pubescens

Climbing galium

Galium nuttallii tenue

Common woolly-sunflower

Eriphyllum lanatum grandiflorum

Fritillary

Fritillaria species

Iris

Iris macrosiphon

Klamath weed

Hypericum perforatum

Morning-glory

Calystegia occidentalis

Purple milkweed

Asclepias cordifolia

Purple sanicle

Tauschia kelloggii

Shasta puccoon

Lithospermum californicum

Snake-lily

Dichelostemma volubile

Sulfur pea

Lathyrus sulphureus

Spear-leaf mountain dandelion

Agoseris retrorsa

Soap plant

Chlorogalum pomeridianum

Whiteflower hawkweed

Hieracium albiflorum

Yellow star-tulip

Calochortus monophyllus

Table II-5 (continued)

TREES AND SHRUBS

Big leaf maple	<u>Acer macrophyllum</u>
Birch leaf Mountain Mahogany	<u>Dercocarpus betuloides</u>
Blue oak	<u>Quercus douglasii</u>
Brewer oak	<u>Quercus garryana breweri</u>
California black oak	<u>Quercus kelloggii kelloggii</u>
California buckeye	<u>Aesculus californica</u>
California laurel; bay tree	<u>Umbellularia californica</u>
California nutmeg	<u>Torreya californica</u>
California redbud	<u>Cercis occidentalis</u>
California scrub oak	<u>Quercus dumosa</u>
California yerba santa	<u>Eriodictyon californicum</u>
California wild grape	<u>Vitis californica</u>
Canyon live oak	<u>Quercus chrysolepis chrysolepis</u>
Chamise	<u>Adenostoma fasciculatum fasciculatum</u>
Deerbrush	<u>Ceanothus integerrimus</u>
Digger Pine	<u>Pinus sabiniana</u>
Douglas-fir	<u>Pseudotsuga menziesii</u>
Fremont silktassel	<u>Garrya fremontii</u>
Fremont cottonwood	<u>Populus fremontii</u>
Foothill Ash	<u>Fraxinus dipetala</u>
Gooseberry	<u>Ribes species</u>
Incense-cedar	<u>Calocedrus decurrens</u>
Interior live oak	<u>Quercus wislizenii wislizenii</u>
Lemmon ceanothus	<u>Ceanothus lemmonii</u>
Pacific dogwood	<u>Cornus nuttallii</u>
Pipe-stem clematis	<u>Clematis lasiantha</u>
Poison-oak	<u>Toxocedendron diversilobum</u>
Ponderosa pine	<u>Pinus ponderosa</u>
Shrub interior live oak	<u>Quercus wislizenii frutescens</u>
Sierra coffeeberry	<u>Rhamnus rubra rubra</u>
Sugar pine	<u>Pinus lambertiana</u>
Toyon; Christmas Berry	<u>Heteromeles arbutifolia</u>
Wedgeleaf ceanothus	<u>Ceanothus cuneatus</u>
Western azalea	<u>Rhododendron occidentale</u>
Western sycamore	<u>Platanus racemosa</u>
White alder	<u>Alnus rhombifolia</u>
Whiteleaf manzanita	<u>Arctostaphylos viscida</u>
Willow	<u>Salix species</u>
Woodbalm; Pitcher sage	<u>Lepechinia claycina</u>

Source: Soil Vegetation Survey, California Department of Forestry, 1980.

association has been greatly disrupted by development along the various watercourses which drain southwesterly across the ridge surfaces of Paradise.

2.34 The Yellow Pine Forest

The yellow pine forest occurs as a broad transitional zone between the foothill woodland and higher mixed coniferous associations and is most thickly developed above 1500 feet elevation in Paradise. It is generally a closed forest dominated by western yellow pine (Ponderosa pine). A closely related conifer, Jeffrey pine, occurs locally on drier sites and serves as a specific indicator of ultrabasic and serpentine rock outcroppings. This Ponderosa pine zone has been the most heavily logged of all the communities in Northern California, and this practice has allowed the encroachment of other woody species into areas formerly covered by pines. The Ponderosa and Jeffrey pines are found locally intermixed with incense cedar, Douglas fir, white fir, black oak, and several additional hardwood species (including big leaf maple, western dogwood, and California bay). The tall pines and other conifers and hardwoods of the yellow pine forest zone represent the dominant habitat type for human settlement in the Paradise area. Considerable attention should be given future development in this vegetation association in order to ensure the maximum protection of the forest alongside the appropriate utilization of the land in order to preserve the unique "forested" flavor of the community.

2.35 Rare or Unique Vegetation Species and Communities

At present only four species of plants are listed by the California Native Plant Society as either "plants rare and endangered" or "plants rare but not endangered" in the general Paradise region. None of these species are located within the metropolitan portion of Paradise; however, one species (*Fritillaria eastwoodiae*) occurs in several sites in the north Paradise-Magalia area (Table II-6). It is recommended that every effort be made to keep accurate records of such plant species in order to maximize their future protection. Additional surveys are recommended for the unique assemblages of plants that occur in serpentine zones. The occurrence of such "serpentine-specific endemic" assemblages should be regarded as a unique aspect of the biological environment of the Paradise area.

Objectives

To identify, protect and preserve rare and endangered plants for their aesthetic, ecological and scientific value.

To protect large stands of native vegetation, especially forest, serving as wildlife corridors.

To preserve, protect, and restore all riparian corridors and other wetland communities for: the protection of wildlife and the aquatic habitat, the maintenance of water quality, the transportation and storage of flood waters, the prevention of erosion, aesthetic quality or cultural significance.

Policies

Amend local ordinances and environmental review guidelines to require environmental review of all proposed developments in areas containing rare or endangered plant species or unique vegetation communities (An EIR would be required if the findings of the initial study indicated potential significant adverse impacts).

Allow land divisions in unique vegetation communities only at densities compatible with protection of these resources as determined by environmental assessment.

Prohibit the introduction of domestic livestock where the grazing activities of these animals will threaten protected vegetation resources.

Encourage the use of native species in landscaping.

Encourage property owners to establish open space easements or deed restrictions for areas containing rare or endangered vegetation resources, allowing access for scientific study.

2.36 Forest Resources

Objectives

To encourage the orderly use of timber resources under appropriate environmental standards to protect the aesthetic and ecological values of forested areas and to ensure that timber extraction be accomplished with due regard to soil and water quality, impacts on wildlife, the resultant succession of the plant communities, and considerations of wildland fire hazard.

Policies

Require an environmental assessment of all timber harvest or clearance operations with particular attention to soil erosion, slope stability, watershed siltation, water quality degradation, recreational and aesthetic values, and impacts on wildlife populations.

Deny any timber harvest or clearance application where an unmitigatable threat to soil, water or wildlife resources has been identified or where it is found that geological hazards cannot be mitigated to within acceptable risk levels.

Table II-6

RARE OR RARE AND ENDANGERED PLANT SPECIES
OF PARADISE AND ADJACENT AREAS

<u>Common Name</u>	<u>Scientific Name</u>	<u>List 1</u>	<u>Status</u> <u>List 2</u>	<u>List 3</u>
Butte County Fritillary	<u>Fritillaria eastwoodias</u>			X
Butte County Checkermallow	<u>Sindalcea rubusta</u>		X	
Red Bluff Rush	<u>Juneus Leiospermis</u>		X	
Bidwell's Knotweed	<u>Polygonum bidwelliae</u>			X
<u>Proposed:</u> Toothwort	<u>Dentaria Pachystigma</u>			X
	var. discetifolia			
<u>Proposed:</u> --	<u>Calysteyia atriplicifolia</u>			
	<u>ssp. Buttensis</u>			X

KEY: List 1 = Plants Presumed Extinct
 List 2 = Plants Rare and Endangered
 List 3 = Plants Rare but not Endangered

Source: California Native Plant Society, Inventory of Rare and Endangered Vascular Plants of California, Special Publication No. 1 (2nd Edition), April, 1980.

Program

Encourage the planting and maintenance of new timber resources that are ecologically appropriate to Paradise, and encourage the effective management of forest stands in order to maintain healthy non-diseased trees in a condition of low fire hazard.

2.4 WILDLIFE

The wildlife reported for the Town of Paradise and its immediate vicinity is compatible with its transitional foothill position on the western flank of the Sierran plateau (as noted above). Since Paradise is unbounded by distinct physical or ecological borders, any cataloguing of wildlife species must necessarily consider the difference between those resident species and those which might be occasional visitors. The wildlife species listings in Table II-7 considers those species which occupy the primary habitats within Paradise and are not meant to represent an exhaustive survey of all sightings.

The urbanized portions of Paradise are still inhabited by a wide suite of animals, a feature which is often mentioned as a positive feature of the local environment. There are no rare or rare and endangered wildlife species occupying their primary habitat at present within the Town of Paradise. The policies regarding wildlife populations relative to development have been formulated to optimize the preservation of present wildlife populations whether or not they are imminently threatened with extinction. An overriding concern is the premise that the wildlife populations of the Town represent an irreplaceable aesthetic, cultural, and scientific resource of the community, and a resource whose protection is in accord with the primary environmental aims of present and future development in Paradise.

2.41 Fish and Wildlife Habitats

Objectives

To identify, protect and preserve fish and wildlife habitats in order to optimize scientific, recreational, educational and economical values, and to minimize negative impacts on life cycles and the natural environment.

Policies

Protect the natural wildlife habitat in development projects through a site design which encourages:

- a. Clustering of open space among adjacent parcels in areas containing valuable wildlife habitats.
- b. Landscaping with native plant species in order to provide and maintain an adequate food supply for foraging wildlife species.

Encourage property owners to establish open space easements or deed restrictions within critical wildlife habitats.

Amend local regulations to require environmental review of all development which may adversely affect designated wildlife habitats.

Programs

Establish a program to continue the identification, mapping, and conservation of critical wildlife habitats within the Paradise area.

Encourage establishment of vegetation and wildlife sanctuaries where such protection is warranted.

Table II-7

THE MAJOR WILDLIFE SPECIES OF PARADISEMAMMALS

<u>Common Name</u>	<u>Scientific Name</u>
Badger (rare)	<u>Taxidea Taxus</u>
Big Brown bat	<u>Eptesicus Fuscus</u>
Black Bear (rare)	<u>Euarctos americanus</u>
Black-tailed jackrabbit	<u>Lepus californicus</u>
Bobcat	<u>Lynx rufus</u>
Brush mouse	<u>Peromyscus boylei</u>
Brush rabbit	<u>Sylvilagus bachmani</u>
California deer mouse	<u>Peromyscus californicus</u>
California ground squirrel	<u>Otospermophilous beacheyi</u>
Coyote	<u>Canis lantrans</u>
Deer mouse	<u>Peromyscus maniculatus</u>
Dusky-footed woodrat	<u>Neotoma fuscipes</u>
Gray Fox	<u>Urocyon cinereoargenteus</u>
Long-tailed meadow mouse	<u>Microtus longicaudus</u>
Mountain lion (rare)	<u>Felis concolor</u>
Mule (black-tailed) deer	<u>Odocoileus hemionis</u>
Myotis bats	<u>Myotis spp.</u>
Porcupine	<u>Erethizon dorsatum</u>
Raccoon	<u>Procyon lotor</u>
Ring-tail (rare)	<u>Bassariscus astutus</u>
Silvery-haired bat	<u>Lasiurus noctivagus</u>
Spotted skunk	<u>Spilogale putorius</u>
Striped skunk	<u>Mephitis mephitis</u>
Townsend's chipmunk	<u>Eutamias townsendii</u>
Trowbridge shrew	<u>Sorex trowbridgii</u>
Vagrant shrew	<u>Sorex vagrans</u>
Western gray squirrel	<u>Sciurus griseus</u>

BIRDS

Anna's Hummingbird	<u>Claytonia anna</u>
Ash-throated Flycatcher	<u>Myiarchus cinerascens</u>
Band-tailed pigeon	<u>Columba fasciata</u>
Bewick's wren	<u>Thryomanes bewickii</u>
Black-throated gray warbler	<u>Dendroica nigrescens</u>
Brown Creeper	<u>Cithia familiaris</u>
California jay	<u>Aphelocoma coerulescens</u>
California quail	<u>Lophortyx californicus</u>
Cedar waxwing	<u>Bombicilla cedrorum</u>
Chipping sparrow	<u>Spizella passerina</u>
Cliff swallow	<u>Petrochelidon pyrrhonota</u>
Common bushtit	<u>Psaltiriparus minimus</u>

Table II-7 (continued)

Cooper's hawk	<u>Buteo jamaicensis</u>
Downy woodpecker	<u>Dendrocopos pubescens</u>
Fox sparrow	<u>Passerella iliaca</u>
Golden-crowned kinglet	<u>Regulus satrapa</u>
Golden-crowned sparrow	<u>Zonotrichia leucophrys</u>
Hermit thrush	<u>Hylocichla guttata</u>
Mountain chickadee	<u>Parus gambeli</u>
Mourning dove	<u>Zenaidura macroura</u>
Orange-crowned warbler	<u>Vermiuora celata</u>
Oregon junco	<u>Junco oreganus</u>
Plain titmouse	<u>Parus inornatus</u>
Pygmy nuthatch	<u>Sitta pyrmaea</u>
Red-breasted nuthatch	<u>Sitta canadensis</u>
Red-tailed hawk	<u>Buteo jamaicensis</u>
Red-winged blackbird	<u>Agelaius phoeniceus</u>
Robin	<u>Turdus migratorius</u>
Rough-winged swallow	<u>Stelgidopteryx ruficollis</u>
Ruby-crowned kinglet	<u>Regulus calendula</u>
Rufous hummingbird	<u>Selasphorus rufus</u>
Song Sparrow	<u>Melospiza melodia</u>
Starling	<u>Sturnus vulgaris</u>
Steller's jay	<u>Cyanocitta stelleri</u>
Turkey vultura	<u>Cathartes aura</u>
Varied thrush	<u>Ixoreus naevius</u>
Vermillion Flycatcher	<u>Pyrocephalus rubinus</u>
Violet-green swallow	<u>Tachycineta thalassina</u>
Western bluebird	<u>Sialia mexicanna</u>
Western tanager	<u>Piranga ludouiciana</u>
White-breasted nuthatch	<u>Sitta carolinensis</u>
White-crowned sparrow	<u>Zonotrichia leucophrys</u>
White-headed woodpecker	<u>Dendrocopos albolarvatus</u>
Yellow-bellied sapsucker	<u>Sphyrapicus varius</u>

AMPHIBIANS AND REPTILES

<u>Common Name</u>	<u>Scientific Name</u>
Alligator lizard	<u>Gerrhonotus coeruleus</u>
California kingsnake	<u>Lampuepeltis getulus californias</u>
California newt	<u>Taricha torosa</u>
Foothill yellow-legged frog	<u>Hyla regilla</u>
Mountain garter snake	<u>Thamnophis elegans</u>
Pacific tree frog	<u>Hyla regilla</u>
Pacific rubber boa	<u>Charina bottae bottae</u>
Salamanders	<u>Plethodon spp.</u>
Western pond turtle	<u>Clemmys marmorata</u>
Western rattlesnake	<u>Crotalus viridus</u>
Western toad	<u>Bufo boreas</u>

Section III

Natural Hazards

NATURAL HAZARDS

GOAL: To ensure the continuing maintenance and improvement of an environment that provides maximum safety to life and property from natural hazard systems in the Paradise area.

3.1 GEOLOGIC AND SEISMIC HAZARDS

3.11 Seismic History and Earthquake Hazard

The Paradise area is located in an area of relatively low seismic activity and consequently has been accorded a category of low potential earthquake hazard by most researches (Geomechanics, 1980; Guyton and Scheel, 1974; and Butte County General Plan, Seismic Safety Element, 1977). Such an approximation must be considered cautiously as a planning tool given the necessity to carefully consider the earthquake hazard in any general plan, the generally high level of seismicity for most parts of California, and the location of Paradise within the Cascade-Sierra Nevada Provinces. Paradise lies in an upland region whose very existence is due primarily to the active mountain-building processes of volcanism and uplifted along fault zones.

The only major comprehensive study of the earthquake hazard in northeastern California carefully considers the record of low seismic history against the need for accurate planning (Guyton and Scheel, 1974). The approach used in this study was to catalog all known earthquake activity and attempt to locate the epicenters of the quake as well as the relative magnitudes of each event. Researches concluded that although past seismic history of any region is the most objective measure of possible future seismic activity, it is usually difficult to assess earthquake activity since existing seismic risk maps of California are inadequate.

Conclusions of the study which may be significant for the ridge area are:

- Of known earthquakes (in northeastern California), 90% were of intensity V or less, capable of little or no damage.
- There have been no human injuries or deaths and only very small property damage from earthquakes within northeastern California.
- There is no evidence of an earthquake greater than magnitude 6.5 having occurred in northeastern California.

- One large fault, the Honey Lake Fault, should become the subject of further research and while there is no evidence that this fault system is potentially dangerous, the evidence is not complete in this regard.
- Since a hypothetical intensity VIII earthquake might occur anywhere in northeastern California, planning within this region should be based upon this event as a maximum intensity.
- Earthquake hazard in northeastern California is not great when compared with the rest of the State nor is it great when compared with other natural hazard systems in the same regions.

(Guyton and Scheel, 1974, p. 26)

The most recent study of the seismicity of the Paradise area (Geomechanics, 1980) reaches quite similar conclusions. This study maps both the fault zones and the epicenters of earthquakes that have occurred near Paradise since 1934. There were 54 earthquakes ranging between 4.0 and 6.9 during the period 1934-1980 (Map III-1). Of this total only five were in the vicinity of magnitude 6.0 or greater. Two earthquakes of relatively large magnitude have occurred relatively close to Paradise; the quake of February 8, 1940, with a magnitude of 5.7 on the Richter Scale; and the quake of August 1, 1975, with a magnitude of 5.7. The former earthquake had an epicenter roughly ten miles northeast of Paradise, and the latter earthquake had an epicenter on the newly discovered Cleveland Hills Fault near Oroville, about 24 miles southeast of Paradise (Table III-1).

The fault zones that may produce seismic activity with an impact on Paradise are listed in Table III-2 and indicated on Map III-1. The seismic potential of these faults relative to the Paradise area falls well within the calculations of Guyton and Scheel cited above. It seems apparent that the three known fault zones that could affect Paradise are: the relatively short Cleveland Hills Fault, the Honey Lake Fault, and the Melones Fault. The Melones Fault Zone is located roughly 35 miles east of Paradise; however, the fault is in excess of 200 miles in length and may represent a local segment of a more extensive central Sierran fault system. It is significant that most researchers accord the maximum credible earthquake along the Melones Fault Zone to be in the vicinity of magnitude 8.25-8.15, a magnitudinal range similar to the extensive San Andreas Fault Zone located over 130 miles to the west.

These data indicate that the closest known fault system to the Paradise region are somewhat short and are unlikely to yield earthquakes of large magnitudes. While long and quite active fault systems are located in the northeastern California region, these are somewhat distant from Paradise and have

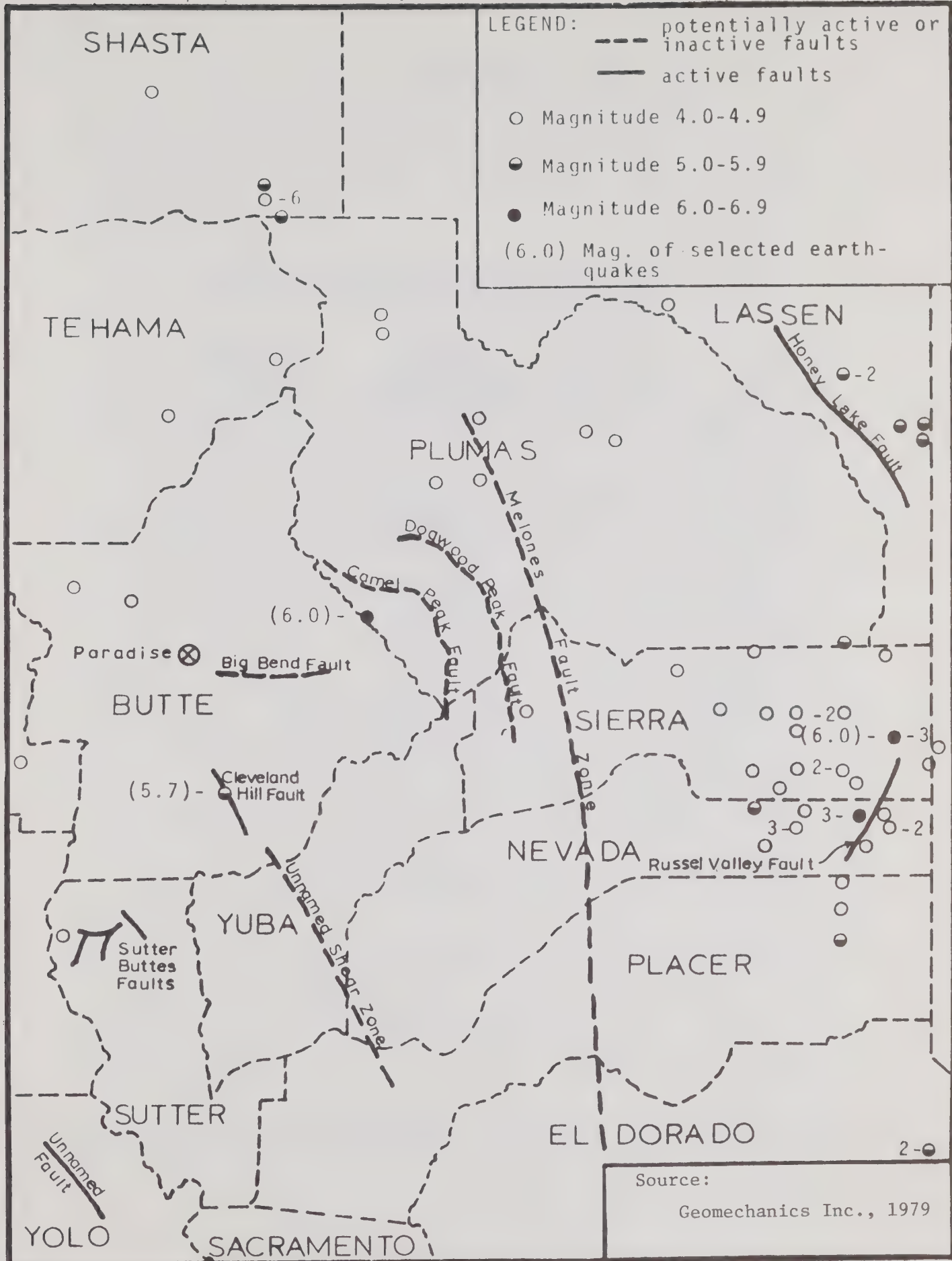


Table III-1

SIGNIFICANT EARTHQUAKES AFFECTING PARADISE

<u>Date</u>	<u>Richter Magnitude</u>	<u>Approximate Location From Paradise</u>	<u>*Modified Mercalli Intensity</u>
12/27/1869	---	Oroville	VIII (Oroville)
1/24/1875	---	20 miles S	VI (Butte)
2/ 8/1940	5.7	10 miles S	VI (Paradise)
11/18/1942	---	NE of Chico	VI (Stirling City)
4/20/1945	---	Paradise	VI (Paradise)
7/ 7/1946	5.0	48 miles NE	VI (Mill Creek)
8/21/1949	4.5	24 miles NE	IV (Butte)
3/20/1950	5.5	30 miles NE	V (Paradise)
5/24/1966	4.6	22 miles SE	
4/29/1968	4.7	61 miles SW	VI (Chico)
8/ 1/1975	5.7	24 miles SE	IV-V (Paradise)

* For explanation of Modified Mercalli Intensity Scale, see Table III-1a

Modified Mercalli Intensity Scale of 1931¹, (1956 version)²

Masonry A, B, C, D. To avoid ambiguity of language, the quality of masonry, brick or otherwise, is specified by the following lettering.

Masonry A. Good workmanship, mortar, and design, reinforced, especially laterally, and bound together by using steel, concrete, etc., designed to resist lateral forces.

Masonry B. Good workmanship and mortar, reinforced, but not designed in detail to resist lateral forces.

Masonry C. Ordinary workmanship and mortar; no extreme weaknesses, like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

Masonry D. Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

I.	Not felt. Marginal and long-period effects of large earthquakes.
II.	Felt by persons at rest, on upper floors, or favorably placed
III.	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake
IV.	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.
V.	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
VI.	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken visibly, or heard to rustle
VII.	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices also unbraced parapets and architectural ornaments. Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII.	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX.	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake fountains, sand craters.
X.	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI.	Rails bent greatly. Underground pipelines completely out of service.
XII.	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

¹Original 1931 version in Wood, H. O., and Neumann, F., 1931, Modified Mercalli intensity scale of 1931 *Seismological Society of America Bulletin*, v. 53 no. 5, p. 979-987

²1956 version prepared by Charles F. Richter, in *Elementary Seismology*, 1958, p. 137-138, W. H. Freeman & Co

not caused truly large earthquakes within historic times. These data should not be taken to infer that hitherto unknown fault zones might not produce locally damaging earthquakes, or that a very great earthquake could not occur along a major regional fault zone such as the Melones or the Honey Lake Fault. It is significant in this regard that the presence of the Cleveland Hills Fault had only been inferred prior to the 1975 earthquake, and although it is presently thought to extend only 10-12 miles in length, such an extent is significant for a municipal entity whose urban dimensions fall well within this range.

The policies and programs listed below reflect the somewhat anomalous position of earthquake hazard planning for the Paradise area. It is clear that the broader statewide and regional dimensions of planning for earthquake hazard incline towards a measure of carefulness; however, a tendency to discount the hazard based upon the historic and recent low profile of damaging activity might be present. The policies detailed below reflect a middle course of action which would recommend a consideration of geological hazards for all proposed development, yet require detailed geological investigations only for those areas with known geological problems. In this way a more detailed map of knowledge regarding the earthquake hazard within the Paradise area may be drawn. Major projects where considerable public risk is apparent, as in the case of the construction of municipal facilities or critical structures such as hospitals, should be required to submit carefully documented geological and engineering reports which should consider the seismic risk along with other related geological hazards such as soil liquefaction, ground shaking, subsidence and earth compaction, and slope movement.

Objectives

To effectively reduce the potential for loss of life, injury, and property damage resulting from earthquakes by regulating the siting and design of new development in the Town of Paradise.

Policies

Prior to the construction of any public facility or critical structure with a high human risk in the event of seismic activity, within the designated fault zones, require a full geological investigation by a registered geologist whenever a significant potential hazard is identified by a preliminary hazard assessment.

Require a review of geological hazards for all new development, including land divisions, in designated fault zones.

Require all new public facilities and critical structures to be designed to withstand the expected ground shaking encountered during a large earthquake.

Table III-2

SEISMIC POTENTIAL OF FAULTS AFFECTING PARADISE

<u>Source of Ground Motion</u>	<u>Maximum Credible Earthquake</u>	<u>Distance From Site (miles)</u>	<u>Maximum Anticipated Bedrock Acceleration(g)</u>	<u>Predominant Period of Motion (Bedrock)</u>	<u>Duration of Shaking (seconds)</u>	<u>Remarks</u>
Cleveland Hill Fault (3 [±] miles long)	6.5	21	.16	0.45	18	Active
Unnamed shear zone along front of Sierra Nevada	7.2	25	.20	0.35	30	Apparently Inactive
Melones Fault Zone (200 [±] miles long)	8.25	34	.23	0.48	50 [±]	Potentially Active
Unnamed fault near Nelson (15 [±] miles long)	6.1	15	.18	0.25	12	Inactive
Sutter Buttes Faults (6 small faults; 2-9 miles long)	5.4-5.8	39	.07	0.27	10	Potentially Active
Unnamed fault near Dunnigan (14 [±] miles long)	6.7	66	.05 [±]	0.43	20	Potentially Active
Midland-Sweitzer Fault (80 [±] miles long)	7.7	69	.07	0.55	25	Partially Active
Coast Range Thrust Zone (200 [±] miles long)	8.25	51	.15	0.55	60	Inactive

TABLE III-2 (continued)

SEISMIC POTENTIAL OF FAULTS AFFECTING PARADISE

<u>Source of Ground Motion</u>	<u>Maximum Credible Earthquake</u>	<u>Distance From Site (miles)</u>	<u>Maximum Anticipated Bedrock Acceleration(g)</u>	<u>Predominant Period of Motion (Bedrock)</u>	<u>Duration of Shaking (seconds)</u>	<u>Remarks</u>
Big Bend Fault (14 $\pm$ miles long)	6.7	2	.67	0.30	20	Inactive
Camel Peak Fault (46 $\pm$ miles long)	7.4	20	.26	0.35	30	Inactive
Willows Fault (30 $\pm$ miles long)	7.2	30	.16	0.35	30	Inactive
Dogwood Peak Fault (48 $\pm$ miles long)	7.4	26	.18	0.36	30	Inactive
Honey Lake Fault (32 $\pm$ miles long)	7.4	70	.07	0.50	30	Potentially Active
Hayward-Calaveras, Concord, Healdsburg- Robers Creek & Green Valley Faults	7.6 $^{+}$	100-120 $\pm$	.05 $^{+}$	0.70 $\pm$	35	Active
San Andreas Fault Zone N section 200+ miles	8.25	130 $\pm$	.05	0.90 $^{+}$	70	Active
Russell Valley	6.5	80	.05	0.4	18	Active

Source: Geomechanics, Inc., 1979.

Program

-Encourage programs to inform the public of proper procedures before, during, and after an earthquake that can help to minimize injury and property loss.

3.12 Erosion Hazard

(See discussion of geology and soils in Natural Resources Section.)

Objectives

To control erosion and siltation from all existing and future land use activities in order to reduce damage to human facilities, the physical environment, and biotic populations.

Policies

Require, as a condition of approval for new development, abatement of any grading or drainage condition on the property which either aggravates existing, or gives rise to potential, erosion problems.

Deny any grading, construction, or timber harvest application where a potential danger to soil or water resources has been identified, and where adequate mitigation measures cannot be undertaken. Single family homes may be developed on existing lots with slopes between 20-30% subject to approval of the site development by a qualified engineer and by the Town of Paradise.

Require development plans to indicate existing areas where vegetation is to be removed during all phases of the project. Vegetation removal shall be limited to that amount indicated on the approved development plans as coordinated with fire safety and flood safety requirements.

Require protection of exposed soil from erosion during the wet season and require revegetation and stabilization of disturbed areas prior to completion of the project.

Require topsoil to be stockpiled and reapplied upon completion of grading in order to promote vegetative regrowth where feasible.

Require the containment of all sediment on the site during construction and require drainage improvements for the completed development that will provide for adequate runoff control.

Prohibit earthmoving operations in areas subject to high erosion hazard potential during the wet season unless preauthorized. If such activities are allowed, measures for sediment containment and erosion control must be in place at the conclusion of each day's work.

Require approval of final site development plans including drainage and erosion control plans for new development, in areas subject to high erosion hazard potential prior to authorization of any initial clearing and grading activities.

Programs

- Identify existing erosion hazard problems on public and private lands within the Paradise area and implement an erosion control plan.

- Adopt and enforce a comprehensive erosion control ordinance requiring control of existing erosion problems as well as the installation of erosion, sediment, and runoff control measures in new developments.

- Establish an active erosion control education program for the general public, builders, and staff in coordination with similar educational efforts dealing with flooding and drainage control measures, and the use of water-effective vegetation types where such usage is indicated.

3.13 Slope Stability (Landslide Hazard)

(See discussion in soils section of Natural Resources)

Objectives

To reduce the safety hazards and property damages caused by landslides and other downslope movements in areas of unstable geologic formations and steep slopes.

Policies

Require a review of geological hazards for all new development projects, including new land divisions, within areas of known slope instability, and in all cases where development is planned on slopes greater than 30 percent.

Require a detailed geological investigation by a registered geologist when the preliminary slope stability hazards assessment identifies unsafe geologic conditions in an area of proposed development, or proposed grading activities.

Prohibit the location of septic leachfields in areas subject to landsliding or other downslope movements unless investigation by a registered geologist or registered civil engineer with a professional background in soils and geology indicates that such placement will not adversely affect slope stability.

Require engineering supervision and an engineering report to ensure effective road reconstruction and redesign where there have been washouts or landslides on private or public roads and require a review of all proposed road construction in areas with known slope stability problems.

Program

- Implement a program to identify areas with existing slope stability problems and revise Town maps as such information becomes available. Coordinate the program to assess landsliding with similar programs dealing with seismic safety, erosion hazard, flooding, and drainage studies.

3.2 FLOOD HAZARD

(See discussion of Climate and Drainage in Natural Resources Section)

Objective

To protect new and existing structures and surfaces from flood damage in order to minimize the economic damages and threats to public health and safety. To prevent adverse impacts on drainage basins and watercourses and to maintain their beneficial function for runoff water storage and transport, and the protection of biotic resources.

Policies

Adequately assess all development proposals within flood hazard zones to ensure adequate protection of development and property improvements.

Approve only those grading and development proposals that do not present a flood hazard or add to flooding damage potential.

Require, as a condition for approval, any grading or development proposal to effectively channel and remove overland storm runoff from the site.

Deny any development proposal which would disrupt existing drainage channels in such a way that total site runoff would be impeded or adversely affected.

Require that any increased runoff from a proposed grading or development site be effectively channeled into existing storm drainage channels and not as overland flow into adjacent properties.

Require, if needed, an environmental assessment of the impacts of vegetation removal, especially tall trees and brush, upon the potential for aggravating the flood hazard on proposed development sites.

Programs

- Develop a management plan for the movement of runoff floodwaters within the Town of Paradise.

- Maintain culverts and drainage facilities on public roads and eliminate obstructions from existing drainage channels.

3.3 FIRE HAZARD (See Map III-2)

The natural hazard system which has the greatest potential impact upon the Town of Paradise and its human inhabitants is the constant danger of damage and injury from wildland fire. The wildfire hazard is the consequence of the topographic setting and elevation of the Town; the distinctive summer dry climate; the inflammable character of the transitional vegetation patterns of brushy and tree species; and, the relatively open character of previous

settlement in the region. The recognition of the fire hazard was verified during the March, 1981 Citizen's Attitude Survey when the majority of respondents identified fire hazard as the paramount natural hazard system of concern to the community (See Appendix A).

The fire hazard situation of Paradise and other foothill communities in California has been recognized by the Office of Planning and Research of the State of California:

In the foothills, the expanding use and development of the wildlands are causing difficulty in providing adequate fire protection. In particular, unclear local state and federal control of new development makes fire protection unmanageable....The lack of adequate fire protection is endangering life, property, and surrounding wildland resources. (Fires in the Foothills, December 16, 1980, p.1)

While a catastrophic wildfire has not yet affected Paradise, there is the constant threat of such an occurrence, a condition which is well recognized by local fire authorities. The rapid response time of fire control units from the three Paradise fire stations has allowed containment of natural cover fires while they are still small. The number of natural cover fire responses has ranged from a low of 40 to a high of 73 (1974) between 1970 and 1980, roughly 3% to 12% of all emergency calls in any year during this 11 year period (Table III-3).

When considering the wildland fire hazard, the primary concern is the buildup of combustible material. Combustible fuels management is the most direct method of reducing the intensity, and thus the potential damage, of wildland fires. The various plant communities of the Paradise area contribute varying quantities of dead debris annually. Table III-4 shows the measurable fuel loading that can be expected beneath the dominant vegetation types of the Paradise area. These quantities range from a low of 1.05-3.40 tons of flammable fuel/acre in open blue oak grassland to a high of 88.7-104.5 tons/acre in various stands of Ponderosa pine forest. Intermediate values are noted for stands of chaparral species. Since the vegetation of Paradise is often transitional in character, these categories should be altered accordingly. In general, the fuel loading for many areas on the periphery of Paradise are high enough to allow their designation as high fire severity. This designation has been applied to the bordering areas of the Town by both the Paradise Fire Department and the Butte County General Plan (Safety Element). The interior of the Town has been accorded a lower hazard rating yet is still considered moderate to high fire hazard depending upon local conditions.

Table III-3

SELECTED EMERGENCY FIRE ALARM CLASSIFICATIONS
OF THE
PARADISE FIRE DEPARTMENT, 1970-1978

<u>YEAR</u>	<u>STRUCTURE</u>		<u>NATURAL</u>	<u>TOTAL</u>
	<u>RESIDENCE</u>	<u>COMMERCIAL</u>	<u>COVER FIRES</u>	
1970	27	4	69	507
1971	30	6	52	501
1972	26	4	56	553
1973	39	5	53	696
1974	32	11	73	823
1975	30	5	54	861
1976	22	5	63	1114
1977	33	7	41	1083
1978	35	8	40	1208
1979	28	9	57	1202
1980	39	5	54	1208

Source: Paradise Fire Protection District, Annual Reports, 1970-1980,
 Paradise, California

Town of PARADISE FIRE HAZARD



Area of severe to high
wildland fire hazard



Location of fire station

0 2000 4000 6000 8000
Scale in Feet

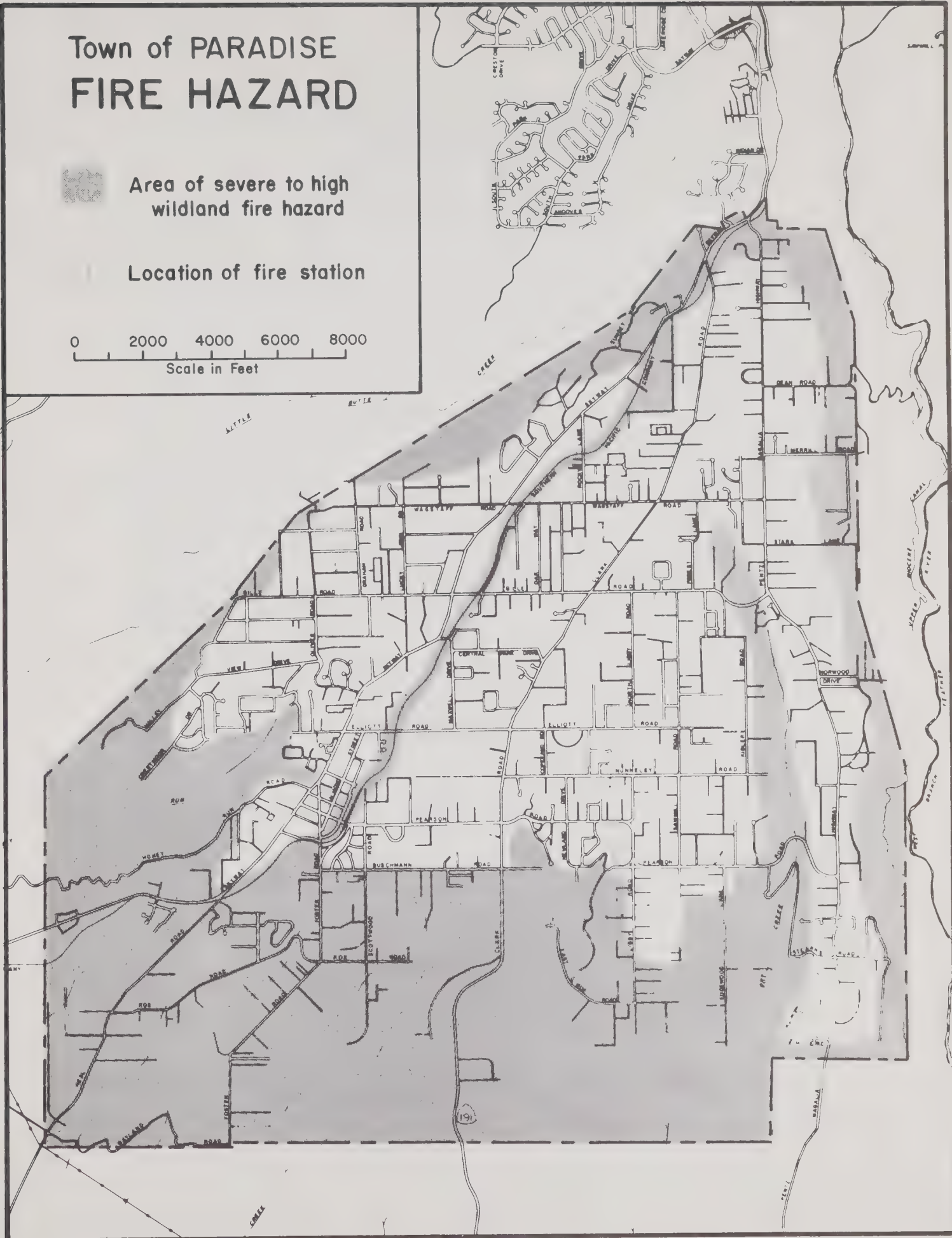


Table III-4

FUEL VOLUMES IN SELECTED NORTHEASTERN CALIFORNIA
VEGETATION COMMUNITIES

<u>VEGETATION COMMUNITY</u>	<u>TONS OF FLAMMABLE FUEL PER ACRE/TOTAL FUEL WADING</u>
1. Blue Oak Grassland	1.05 - 3.40
2. Chamise Scrub	7.31 - 32.54
3. Heavy Chaparral (Principally Scrub Oak and Toyon)	27.19 - 46.84
4. Montane Chaparral	35.0
5. Mature Ponderosa Pine Timber (materials 4" and less in diameter)	88.4 - 104.5
6. Ponderosa Pine Timber (medium production and Brush (materials 4" and less in diameter)	59.5 - 88.7
7. Second-Growth Ponderosa Pine (materials 4" and less in diameter)	65.2 - 84.7
8. Slash and litter from clear-cut, young- growth Ponderosa Pine	53 - 89
9. Slash and litter from clear-cut, young- growth Ponderosa Pine and Douglas Fir	83 - 110
10. Slash and brush from clear-cut mixed coniferous forest	39 - 43

Source: California Division of Forestry, Fire Control Notes,
No. 37, Sept., 1976

The high fuel loading coupled with the long dry summer season with its gusty, drying northwesterly winds creates a peak fire hazard season during late June to early October. Other conditions which may aggravate the fire hazard include slope and exposure, the nature of access roads, the distance from fire-fighting facilities, water availability, and the character of the vegetation cover. The heavy growth from one very wet growing season may be heavily killed back (and become dead flammable material) by the following dry summer or by a year of unusually low rainfall. This condition has occurred on at least three occasions during the past 15 years.

The specific policies and programs advocated in this plan are directed towards diminishing the immediate fire hazard to both a specific development project and the community as a whole. The general trend is towards the creation of a fire break zone which is composed of the developed portion of the Town. While this would decrease the potential damage and injury from wildfire to the metropolitan area of the Town, additional long-term measures will still need to be applied to the high fire hazard periphery of Paradise--the canyon sides of Butte Creek and the West Branch of the Feather River; the forest/brush cover of the north Paradise-Magalia vicinity; and the brush/oak woodland cover of the ridges of south Paradise and their adjacent chaparral covered slopes. Paradise is very much an island within a matrix of highly flammable vegetation communities. Only careful attention to each proposal for development as well as long-range efforts to reduce this hazard.

While effective fire protection planning is a necessity, additional programs should be developed in order to institute a community-wide emergency preparedness plan. Such a plan needs to have clearly established lines of authority and guidelines for action, as well as a planned network of emergency stations, facilities, and authorized personnel to deal with emergency conditions such as those imposed by wildfires. Careful attention needs to be directed towards pre-emergency planning by both governmental and civic groups in order to maintain clarity of authority and reaction, and to ensure that the appropriate personnel are placed in their appropriate positions to aid in the emergency reaction process. Prior attention should be given to the fiscal implications of such an emergency preparedness plan including such aspects as training exercise, storage of vital stocks (such as food and medicines), an inventorying and perhaps purchase of vital emergency apparatus, training courses for volunteers and professional staff personnel (e.g. CPR and first aid), and the designating of evacuation routes from disaster sites. Every attention should be given to reciprocal response by other federal, state, and

local agencies which can offer parallel emergency personnel and facilities in order to ensure maximum response to emergencies within the Town of Paradise.

Objective

To protect the public from natural fire hazards and reduce the risk of wildfires and structural conflagrations by mitigating or minimizing use and development in high fire hazard areas and by maximizing fire prevention measure and citizen awareness of fire hazards.

Policies

Require all new developments, including single family dwellings on existing parcels of record, to provide adequate access for fire protection.

Amend Town Ordinances to include specific road standards developed in conjunction with the Fire Department.

Maintain minimum fire response times of 5 to 10 minutes for all areas of the Town.

Provide adequate water availability within 300 feet of new habitable structures.

Maintain adequate clearance of fuel materials including vegetation around structures.

To the maximum extent feasible conduct periodic inspections of vacant properties to ensure that dry weeds and other combustible fuels are not permitted to accumulate.

Section IV

Life Enrichment

LIFE ENRICHMENT SECTION

GOAL: To provide and maintain the resources and services necessary to meet the life enrichment desires and service needs of the citizens of Paradise.

4.1 Resources for Life Enrichment

Accompanying the desire to live in a wholesome, refreshing environment, many Paradise residents would like to participate in or experience life enriching activities. Various recreation studies in the United States have shown most people work to accumulate resources to better utilize or enjoy their leisure, including retirement and for most people, their choice of leisure activity determines to a significant degree, the individual's physical and mental fulfillment and well-being.

Paradise citizens are very recreation oriented. In the Paradise area there are recreation opportunities that range from cultural events to outdoor activities such as walking, hiking, and fishing. There are also numerous retirement and religious groups, which are active in recreational activities. This frequently involves providing their own service, recreational and leisure time needs. The splintered or disunited and frequently competitive efforts between these groups has limited progress in attaining certain desired facilities and activities that would benefit the majority of the townspeople.

A prime accomplishment of this planning effort has been to bring various groups and individuals concerned with recreation, cultural, historical, and senior services together to establish goals and objectives for the common good. Further, it has provided a framework whereby various resources might be aggregated, and more efficiently used to help move toward overall goals for the good for the community.

There are insufficient resources to meet all of the needs noted in this Life Enrichment section at one time; this planning tool will facilitate the development of a program to meet the townspeople's needs as identified in the elements in this section.

4.11 Purpose

In accordance with the State Planning Guidelines, the purpose of the Life Enrichment Section is to:

1. Identify current and projected demands for facilities and services.
2. Inventory and describe (map) existing resources related to these demands.
3. Determine present and projected recreation facility deficiencies.
4. Establish broad goals as they relate to life enriching programs and resources.
5. Identify specific objectives to help achieve or move toward these goals.
6. Recommend specific policies to provide, protect, operate, and maintain facilities and services to accomplish desired objectives.
7. To identify specific programs, activities, and resources necessary to implement the policies.

4.12 Separation of Recreation, Senior Services, and Cultural and Historical Services Elements

Traditionally, cultural and senior services were delegated to the park and recreation departments of local governments because these departments were directly responsible for providing public programs and services. In the 1970's many local governments expanded their roles to provide increased social services ranging from child care to senior programs such as "Meals on Wheels." Many recreation departments have changed their titles to correlate with these expanded services. The most common new name is Community Services.

Paradise is unique in its large number of senior citizens and in its strong desire for cultural activities and programs. In order to give these areas the attention they deserve, separate elements were drafted for each area of service.

4.2 RECREATION

GOAL: To provide for a full range of recreation programs and facilities through which the residents of Paradise may enhance their physical, mental, and social well being.

4.21 Background to Recreation Planning

The State Planning Guidelines and sound recreation planning require that assessments be made of: (1) present and projected recreation demand, (2) existing and proposed recreation areas and facilities; and (3) present and projected recreation area and facility deficiencies.

Programs are then designed to meet area and facility deficiencies which include: methods of acquisition, development, operation, maintenance, and management.

Two separate surveys were conducted to determine the recreation area, facility, and program desires of Paradise residents. The first study was initiated by the Paradise Area Parks and Recreation District and was conducted by a planning team of approximately 30 members working with the Recreation Administration Department at California State University, Chico.

The study was conducted door to door with a random sample taken from each of the major areas of the Ridge within the District. The target area was broken into three geographic areas of fairly equal population: (1) west of the Skyway; (2) east of the Skyway, and generally north of Nunneley; (3) east of the Skyway and south of Nunneley. Responses representing the desires of over 9,000 ridge residents were tabulated in a draft report and presented to the Paradise Recreation and Park District Board in 1979.

A second validation and updating of recreation needs were obtained through the Citizens' Attitude Survey conducted in March 1981. While not as extensive and detailed as the 1979 study, the 1981 survey contained a sampling of the demand for programs and facilities from more than 1,400 town households. The survey also provided recreation information regarding such issues as desired use of the abandoned Southern Pacific Railroad right-of-way, the demand for walkways and paths, and preserving scenic views and places.

To provide a means of comparison between the surveys, the top items (facility demands) on the 1979 survey and an added single item (auditorium) were included in the 1981 survey. The results of both surveys were reviewed and endorsed at public meetings. The recreation area and facility demands were then compared to existing resources to determine current deficiencies in Paradise.

4.22 Existing Local Parks and Facilities

This is a composite listing of the areas and facilities available for public recreation in Paradise.

EXISTING PARK LOCATIONS AND FACILITIES (T=in Town limit, D=in Recreation and Parks District) (See Map IV-1)

(T) 1. John Bille Park--western end of Bille Road, Paradise

This 54 acre day-use facility contains picnic areas, barbecue pits, open spaces, hiking trails, water and electricity (will accommodate 125 people). This park contains definite evidence of inhabitation by Indians.

- (D) 2. Coutolenc Park--Coutolenc Road (2.5 miles north of the Skyway).
This 320 acre park has areas for day camping and picnicking.
- (D) 3. Crain Memorial Park--near Concow Reservoir.
This 6 acre park contains picnic areas, a ball park, and open areas.
- (T) 4. Paul Byrne Aquatic Park and Rotary Grove Park--Buschmann Road, Paradise
This 10-acre facility contains a swimming pool, fishing for ages 12 and under, picnic area, fitness game field, barbecue facilities, ball-sports area in joint use with Paradise Intermediate School, tot lot, volleyball court, natural areas and other amenities (restrooms, parking etc.).
The Paradise Rotary Club in 1980 approved a long-range master plan to continue the development of Rotary Park. Proposed improvements include increased picnic facilities, improvement of the plan areas and a covered pavillion.
- (T) 5. (Forest Service) Ball Park--Moore Drive, Paradise
This area has two lighted ball parks, a 40'x40' open play area and children's play equipment. Other facilities include a fenced riding arena, a day camp area, picnic areas, campfire rings, benches, bleachers, and three parking areas for over 75 cars. There are also a concession facility, two comfort stations, storage areas, and storekeeper booths.
- (T) 6. Recreation Center--6626 Skyway, Paradise
Located within this 2-1/2 acre facility is a community center including a kitchen and craft area, meeting rooms, offices, storage facilities and indoor restrooms. Outside there are shuffleboards, a volleyball area, basketball court, a horse-shoe pit, a tot play area, picnic areas, a gazebo, outdoor restrooms, bicycle racks, drinking fountains, benches, 78 parking spaces, and security lights.
- (D) 7. Paradise Reservoir--North Lake Road
Maintained by the Paradise Irrigation District, the reservoir is open every day but Tuesday. The water-shed area is 8.3 square miles, with 11,500 acre feet of water, and a shoreline 7.5 miles long. Shoreline fishing is offered year round in prescribed areas. Swimming, boating, and overnight camping are prohibited. There are 12 tables, one designed to accomodate the handicapped, located near the dam. There are two sets of toilets, one designed for the handicapped. The Paradise Rotary Club has financed a tot lot with swings, jungle gym, etc.
- (D) 8. Rifle Range--Coutolenc Road (3 miles north of the Skyway)
- (T) 9. Little League Baseball Diamonds (two)--to be constructed at Buschmann Road and Recreation Drive.
- (T) 10. There is a small, less than .25 acre, picnic site (with tables) behind the Gold Nugget Museum on Pearson Road.
- (T-D) 11. Various formal and informal, private and semi-public hiking trails. (See further discussion in Existing Trails Section.)

Town of PARADISE
PUBLIC PARKS/SCHOOLS

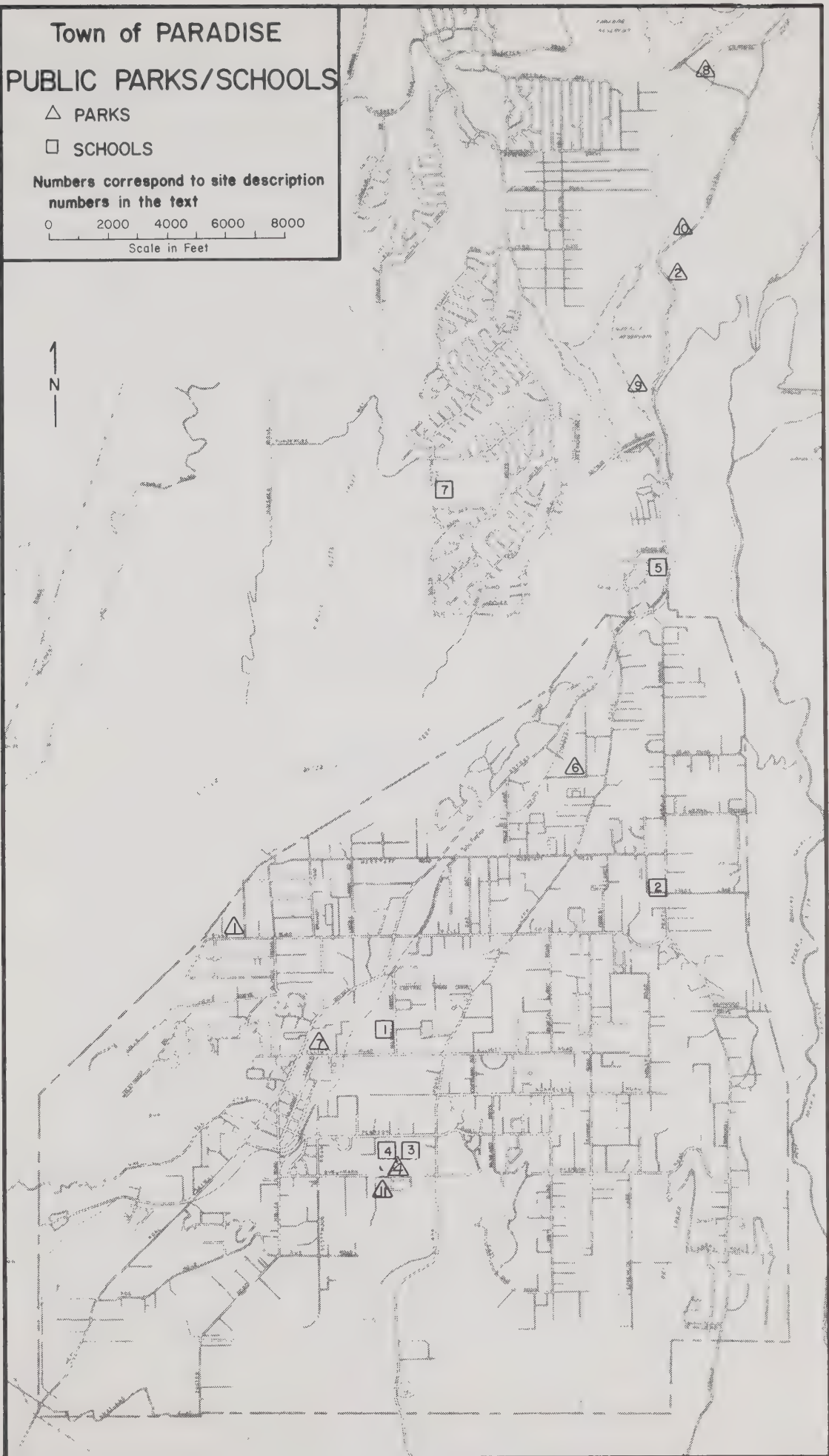
△ PARKS

□ SCHOOLS

Numbers correspond to site description
numbers in the text

0 2000 4000 6000 8000
Scale in Feet

↑
N



4.23 Existing Local Trails

The many miles of hiking trails in and near the Town of Paradise play an important role for recreation in the area. Local trails are used for access, hiking, fitness, recreation, environmental education, and appreciation.

While many of the trails are on privately owned land (including P.G.&E. and Southern Pacific), hikers have respected most areas and public use has not been discouraged or prohibited.

The need to encourage the acquisition and development of public trails is central to the policies of the Life Enrichment Element. The Town should pursue acquisition of the Southern Pacific Railroad right-of-way for use as a pedestrian and equestrian thoroughfare.

It is hoped that this trail can be preserved to Stirling City. Once enhanced, it is projected that this north to south passageway through Paradise will accommodate hundreds of persons per day. This route could connect to lateral bicycle and walkway lanes to provide access to the major activity areas in Paradise. The Town should establish a program to develop a master plan for pedestrian, bicycle, and equestrian paths and trails.

The list below locates and provides information on the publicly used trails in the Paradise area.

EXISTING TRAILS
(P=Privately Owned)
(See Map IV-2)

1. Southern Pacific Right-Of-Way (Proposed Designation)

This trail runs from Neal Road on the south to beyond the Town limits on the north, and is presently unnamed. When officially designated, it will be the main route for non-motorized access through and within the Town and will safely accommodate pedestrian, bicycle, and equestrian use.

(P) 2. Valley Ridge Trail

This trail extends from the end of Valley Ridge Drive in southwest Paradise to an excellent vista point overlooking Butte Creek Canyon.

(P) 3. Valley View Trail

This trail exists on property that is proposed for development at the south end of Valley Drive. It is proposed that if this area is developed, a park should be provided to help preserve some of the natural resources and benefits of the area.

(P) 4. Rivendell Lane/Rogers Trail and Wildlife Sanctuary

This is a privately-owned sanctuary and is not open for public use.

5. Bille Park Trail

This trail is located in Bille Park. It provides a walk by a water grotto, along a large Indian grindstone to a vista bluff area overlooking Little Butte Creek. The "Grand Canyon" type view from the bluffs is spectacular.

(P) 6. Town Trail

This trail starts at the end of Circle Lane in south Paradise and runs west toward Clear Creek and east toward Dry Creek. The Clear Creek area is particularly abundant with flora and fauna.

7. Chrome Mine Trail

This trail runs from middle Butte Creek to the former Chrome Mine just south of Aurora Court in Paradise Pines.

8. Paradise Reservoir Trail

This trail starts east of Paradise Reservoir Dam and runs around the lake to a point approximately 2.6 miles north of North Lake Road.

9. Ponderosa Way Trail

This trail runs along the Ponderosa Road cut to Nimshew Ridge Road.

10. Merchants Bar Road Trail

This trail runs along Merchants Bar Road to Merchants Bar at Little West Branch of the Feather River.

11. Magalia Dam Trail

The hike runs on the east side of Little Butte Creek.

12. Numerous other trails exist to the north and west of Paradise that cannot be shown on the map. The best of these trails go from: (1) Philbrook Reservoir to Lott's Lake(P) and on to the Pacific Crest Trail; (2) Butte Meadows to Snag Lake; (3) Butte Creek Trail running two miles south from Doe Mill Road; and various trails running north off Humbug Road.

4.24 Local School Recreation Facilities

EXISTING SCHOOL RECREATION FACILITIES
(T=in Town limits, D=in District limits)
(See Map IV-1)

(T) 1. Paradise High School--5911 Maxwell Drive, 3.2 acres

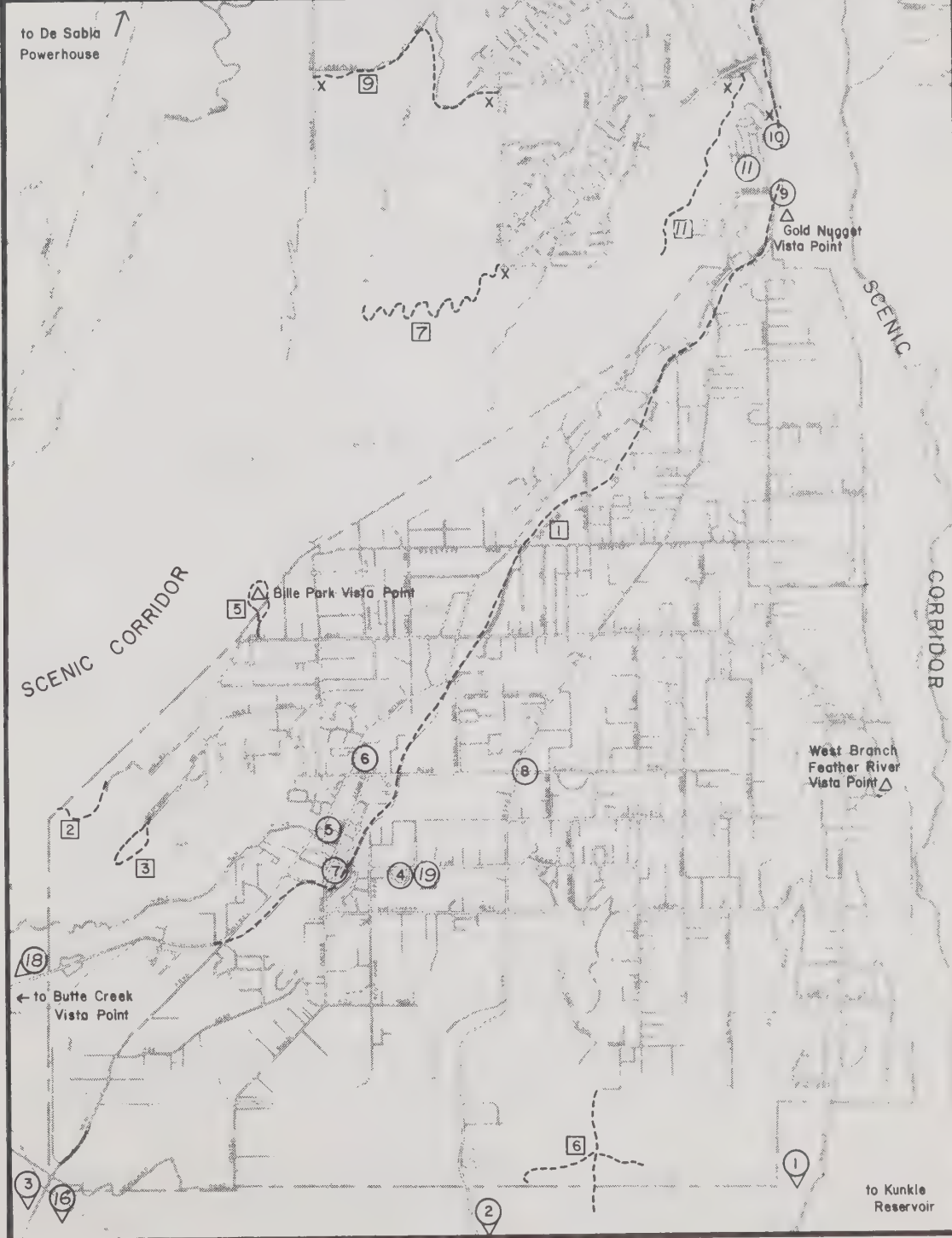
The school contains one multi-purpose room, two arts and crafts rooms, gym, cafetorium, 21 bathrooms, a concession stand, maintenance shop, a maintenance equipment storage area, a metal shop, and a wood shop. Other facilities include a weight room, an adult baseball field, a football field, 400 meter jogging trail, two multi-purpose fields, 8 lighted tennis courts and 8 outdoor basketball courts. The stadium will accommodate 1,700-2,000 people. There are three parking lots, a stage in the gym, 3/4 acre natural area, one amphitheater, 3-1/2 acres of turf and 8 picnic tables.

Town of PARADISE RECREATION, SCENIC, & HISTORICAL SITES

- Historical Landmarks
- △ Direction of Landmarks not on map
- Trails
- △ Vista Points
- x Parking

Numbers correspond to site and trail description numbers in the text.

0 2000 4000 6000 8000
Scale in Feet



- (T) 2. Ponderosa Elementary School--6593 Pentz Road, 9.1 acres

The buildings consist of one multi-purpose room, one cafetorium, 3 bathrooms, one maintenance equipment storage, one library, and concession facilities. Sports facilities consist of 2 outdoor basketball courts, jogging trail, a football field, a multi-purpose field, play area, soccer field, 2 youth softball fields, and 5 tetherball areas. Other features are bleachers, parking lot for 80 cars, 2 single picnic tables, and one group picnic area.

- (T) 3. Paradise Elementary School--588 Pearson Road, 12 acres

Contains a multi-use room which includes a cafeteria and stage, 2 basketball courts, children's play equipment, exercise equipment, 2 football fields, jogging trail and fitness course, natural area, soccer field, 2 softball fields, special play area, 7 tetherball courts, and a hard surface play area.

- (T) 4. Paradise Intermediate School--550 Pearson Road, 20 acres

Facilities include 4 football/soccer fields, 2 baseball fields, sand lot and monkeybars, 4 basketball courts, tetherball courts, exercise room, gym/cafeteria, library, 4 restrooms, and a parking area.

- (D) 5. Ridgeview High School--Skyway, Magalia, 6 acres

This is a continuation school serving 80 students. It has arts and crafts facilities and an auto shop, horseshoe pits, one hard surface play area, and 20 parking spaces.

- (D) 6. Concow School--East of Paradise, 17 acres

This facility has a cafeteria which is also utilized as a gym and auditorium, Golden Feather Pool, hard surface play area, one outdoor and one indoor basketball court, one tetherball court, a small multi-use field, and playground equipment area.

- (D) 7. Proposed Paradise Pines Elementary School--North of Paradise in Paradise Pines, 10 acres, on Compton Drive off Ponderosa Way.

4.25 Existing Semi-Public, Private, and Commercial Recreation Facilities

EXISTING SEMI-PUBLIC, PRIVATE AND COMMERCIAL RECREATION FACILITIES

(See Map IV-3)

1. Paradise Pines P.O.A. Village--350 Wycliff Way, Paradise Pines

The facilities at the P.O.A. Village include two tennis courts, a large jacuzzi and a swimming pool, a basketball court, two sauna rooms, recreation center, meeting area, a pool table, 20 picnic tables, 10 barbecues, and an equestrian area at Wycliff Way and Racine Circle. There is also a 39-unit campground, open April through November.

2. Paradise Pines Golf Course--20 South Park Drive, Magalia

This 2500 yard, 9-hole golf course has a pro shop and restaurant, with 10 picnic tables, 3 barbecues, and 3 benches.

3. Butte Fire Center--Steiffer Road, Magalia

Facilities consist of two barracks accommodating approximately 70 California Conservation Corp (CCC) personnel, and the California Division of Forestry (DCF). The outdoor recreation facilities consist of a basketball court, baseball field and diamond, fitness area, and a volleyball court.

4. Paradise Bowl--6696 Clark Road

This bowling alley has a total of 20 lanes for a capacity of 400 people, a restaurant with a total seating capacity of 100, and a bar which seats 60.

5. Concow Reservoir--Off Highway 70, 300 acres of water, 400 acres land

This reservoir, owned by the Thermalito Irrigation District, has a recreation season from April 1 to Labor Day and provides a picnic and fishing area. No swimming and power boats are allowed on the water. Five hundred to six hundred permits are sold annually to use the reservoir.

6. Elks Lodge--6309 Clark Road, 8 acres

This lodge has a large multi-purpose room and bar which can be reserved and rented for public use. There are ten picnic benches and developed picnic areas for group outings.

7. Odd Fellows Hall--1010 Elliott Road

There are two separate halls which can be rented for parties, meetings, and dances.

8. Paradise Art Center--5564 Almond Street, Paradise

This facility provides a place where arts and crafts may be learned and purchased. There is also an art gallery.

9. Feather River Health Center--located behind Feather River Hospital (5974 Pentz Road, Paradise)

This facility provides exercise equipment, one ping-pong table, archery equipment, mens and womens locker rooms, workout equipment, and a health library

10. Tall Pines Golf Course--5325 Clark Road, Paradise, 28-1/2 acres

This 9-hole golf course has a pro shop, a driving range, a natural area, a barbecue, small patio, two restrooms, benches, 50 parking spaces, and security lighting. It is open to the public with a fee.

11. Centerville School (Museum), Coleman Community Memorial Museum

Picnic area, basketball court, lighted court for dances in meadow, volleyball nets, children's playground, and trails to Indian camps.

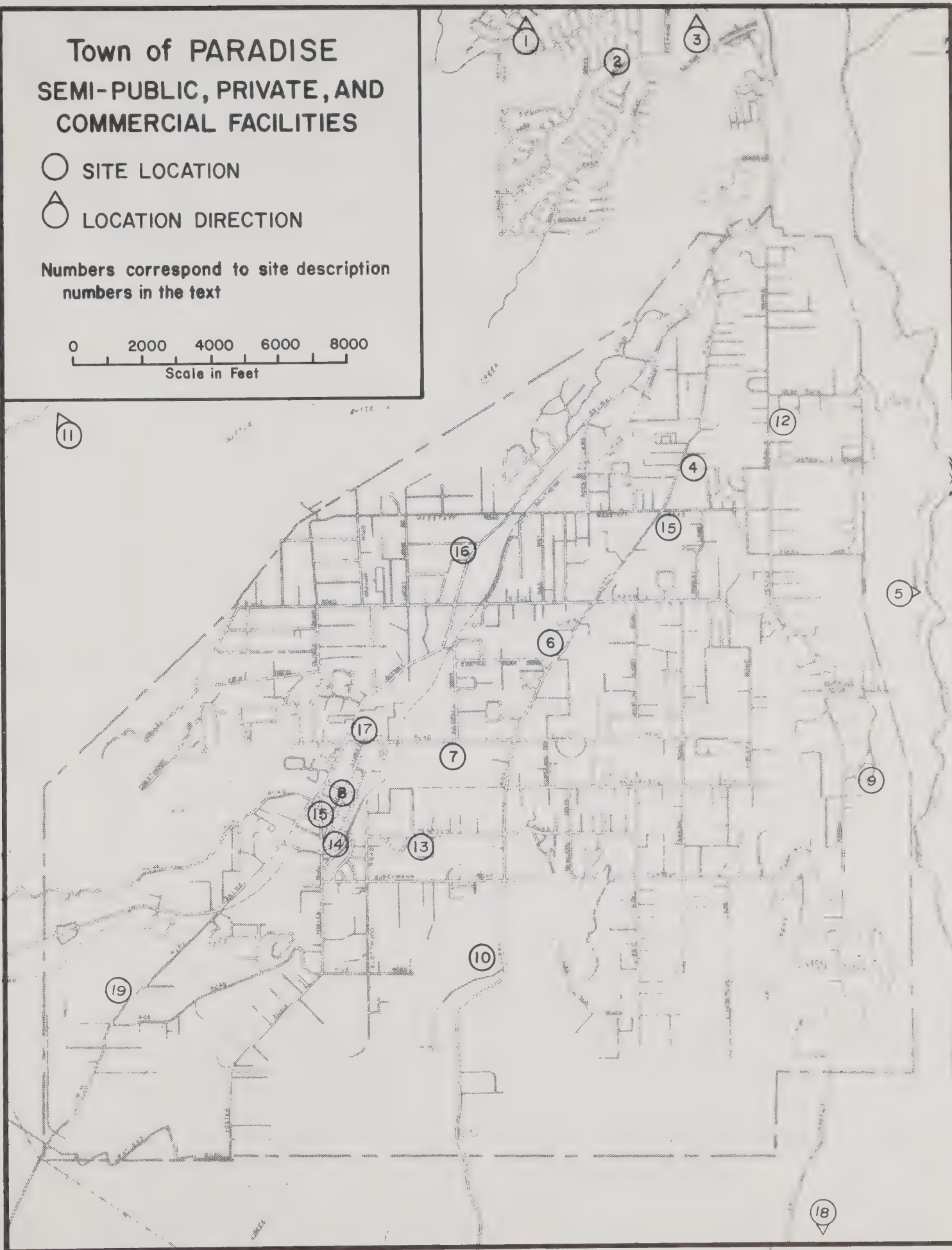
Town of PARADISE SEMI-PUBLIC, PRIVATE, AND COMMERCIAL FACILITIES

○ SITE LOCATION

△ LOCATION DIRECTION

Numbers correspond to site description
numbers in the text

0 2000 4000 6000 8000
Scale in Feet



12. Sporthaven Health Club--5864 Pentz Road

Eight raquetball courts, weight and exercise room, health bar, various classes and programs for members and guests.

13. Gold Nugget Museum--500 Pearson Road

Historical artifacts of the Ridge area.

14. Pine Ridge Theatre--Skyway at Foster.

15. Mountain Pines Cinemas I & II, Clark at Wagstaff.

16. The Meeting Palace--7967 Skyway

Recreation and education classes, lectures, recitals, dances banquets, receptions, club meetings, etc.

17. Veteran's Memorial Hall--Skyway at Elliott

Multi-use facility with meeting, gaming, kitchen, stage, and exposition uses.

18. Lime Saddle Marina--East side of Pentz, 4 miles south of Town limits

Private boating concession on State leased land. Boat launching and mooring, tackle shop, and delicatessen.

19. Theater On The Ridge--3735 Neal Road

Features local talent, live performances, plays, musicals.

4.26 State and Federal Parks

STATE RECREATION AREAS

1. Loafer Creek
2. Bidwell Canyon
3. Kelly Ridge Visitor Center Complex
4. Spillway Ramp
5. Boat-in Camps:
 - Goat Ranch
 - Craig Saddle
 - Sycamore Cave
 - Foreman Point
 - Bloomer North Point
 - Bloomer Knoll
 - Bloomer South Cove
 - Bloomer Group Camp
6. North Forebay
7. South Forebay
8. Lake Oroville SRA Headquarters

FEDERAL FACILITIES

- A. Rogers Cow Camp
- B. Milsap Bar
- C. Bald Rock
- D. Feather Falls Overlook
- E. Lewis Flat
- F. Shadey Rest (P.G.&E.)
- G. Plumas National Forest Ranger Station
- H. Cherry Hill Campground
- I. Philbrook Campground
- J. West Branch Campground
- K. Butte Meadows

9. Bidwell State Historic Park, Chico
10. Sacramento River Park
11. Gianelli Bridge, Sacramento River, Highway 32
12. Gray Lodge Wildlife Refuge, Southwest of Gridley

4.27 Recreation Area Deficiencies

Despite its natural park-like atmosphere, Paradise is very deficient in "in town" public park and recreation facility acreage. According to recommended standards, with Paradise at a population over 20,000, the Town or District should be providing a minimum of 125 acres in public parks in the Town area. In reality, Paradise has only the Veteran's Hall recreation center/park (2-1/2 acres), Bille Park (20 acres) - the site has 54 acres, but approximately 34 acres are unusable, the 20 acre ballpark, Paul Byrne and Rotary Park (10 acres together), for a total of 53+ acres. This implies a deficiency of over 70 acres in public park space alone. With the State facilities at Lake Oroville, Bidwell Park in Chico and the many Forest Service Areas, the Ridge has more than enough regional, State and Federal recreation acreage.

According to the projected 1990 population forecasts, Paradise will have a population of 28,580 and the Ridge will have a total population of 40,700. At this time, Paradise and the area covered by the Recreation District will be even more deficient in park space and facilities. The need for neighborhood parkland in the Recreation District will have increased by 35 percent and in the Town of Paradise by almost 45 percent.

Over the next ten years the following recreational facilities will be needed for the Paradise area:

1. an additional public swimming pool
2. at least two neighborhood recreation buildings
3. an outdoor performing theatre (needed now)
4. additional outdoor lighted softball fields
5. outdoor lighted courts - multipurpose, tennis and basketball
6. lighted multi-use fields for youth soccer and sports
7. additional racquetball courts
8. additional senior citizen facilities
9. a community theater
10. an auditorium
11. a nature/natural science museum
12. an additional track
13. an archery facility
14. an additional bowling facility

15. group and individual picnic area
16. more hiking paths
17. additional fitness courses
18. additional wildlife or zoological facilities
19. a local campground

Policy

The Town and District should develop the phasing, financing, and location of these facilities.

4.271 Ranked Recreation Facility Deficiencies

A comparison of the 1979 and 1981 recreation survey (with the 1981 survey weighted) yielded the following ranking of recreation area and facility demands of deficiencies (other facilities are lacking according to Paradise Recreation and Park Facility Standards; however, they are not considered top priority of the residents):

RANKED FACILITY DEFICIENCIES

1. Bicycle and Pedestrian Footpaths and Trails
(access to areas, facilities, and services as well as for fitness and recreation)
- *2. A Multi-Services Center (with Indoor and Outdoor facilities)
for:
 - A. Senior Services and Programs (primary users)
 - B. Cultural classes and activities
 - C. Youth and community recreation class and activities
 - D. Programs for the handicapped and disabled

*This proposed facility represents the needs of four separate facility demands indicated in the survey: first, and the second greatest overall need, a Senior Citizens facility...which would be the facility's primary use. This facility would require indoor and outdoor areas; second, a facility for cultural activities and classes (which may be used and aided by the seniors); third, a facility for youth and community recreation classes and activities...again which may be shared and aided by seniors; and fourth, classes and programs for the handicapped and disabled (if a more suitable facility cannot be found). Such a facility, properly located could also provide a botanical garden, picnic areas, outdoor cultural facilities and fitness and nature trails.

3. Nature/wildlife area and facilities
4. Public benches (and shaded rest areas)
5. Auditorium (primarily for community 900+ seats) Cultural and High School use
6. Picnic Facilities, both individual family and small group facilities
7. Exercise, jogging and fitness areas and facilities

8. Night lighted ballfields (additional, for adult softball and youth athletic use)
9. Year-round swimming pool
10. Botanical/Community Gardens

4.28 Recommendations to Correct Current Recreation Area and Facilities Deficiencies

1. Bicycle and pedestrian foot paths and trails

Master plans should be developed for these areas in and outside of the Town limits. The Town and the County should work and allocate monies over the next 10 years to complete this system.

2. Multi Services/Senior Center--with indoor and outdoor areas and facilities

Ideally it would be beneficial to have separate facilities for each of these programs. The cultural activity groups should have the opportunity to locate a site and raise money to develop and operate a facility with limited assistance from the Town and Recreation District. If this cannot be done or until this can be done, the multi-services recreation center will have to be used for various cultural activity classes (art, etc.).

The proposed multi-services center will be designed, constructed and operated primarily to serve the varied needs of senior citizens.

In addition to large indoor multi-use rooms, the center should house class and meeting rooms, a kitchen, offices, restrooms, outdoor patios, shuffleboard courts, outdoor walking, nature, picnic and botanical areas, and a lawn bowling area--all of which could be maintained by senior citizens.

3. The site for the nature/wildlife area facilities will be determined and discussed under policies for these areas.
4. Public benches and shaded rest areas should be located and provided on a priority basis.
5. Additional picnic facilities should be developed at existing park sites and in conjunction with any future park development.
6. In addition to the new exercise course at Rotary Park, a second area for walking, jogging, and fitness, should be developed at Bille Park.
7. The District and Town should locate areas for additional lighted softball fields and develop a master plan for their acquisition and development.
8. A location for an indoor pool should be studied. While this facility may not be developed for a few years, plans should be made in the next two years for its location and design.
9. The development of a botanical or community produce gardens should be encouraged.
10. The feasibility of a small community park should be investigated to be located at Clark and Bille behind the Central Bank. Some facilities for picnicking and benches, walkways and other uses should be encouraged.

12. The Southern Pacific Railroad Right-of-Way

This right-of-way through Town could become a most desirable pedestrian, bicycle, and equestrian circulation route. It could be linked via cross paths to schools, shopping, recreation, and other popular resident destination points or facilities. Such a trail is supported by approximately 80 percent of the Town residents (Citizens' Attitude Survey, March, 1981).

4.29 Recreation Objectives and Policies

Objective

To see that lands and facilities are made available, developed, operated, and maintained to meet the recreational needs of Paradise residents.

Policies

Areas and facilities should be provided to meet the needs of all segments of the population for both day and evening use.

A fiscal capital outlay program should be developed to meet existing recreation area and facility deficiencies as well as to provide for future needs on a "provide-as-grow" basis.*

*Examples: park dedication fees, revenue sharing, state, federal, and private grants, contributions, concessions, and user fees.

In newly proposed subdivisions, multiple dwelling units, and mobilehome parks, it should be determined how the general recreation needs of the new residents will be satisfied. All developments should provide for their new residents within the developments or contribute to the provision of facilities by the Recreation and Park District or a combination of these.

The Town should cooperate in the provision of recreation facilities with the Paradise Recreation and Park District, the Unified School District and other organizations or agencies as appropriate.

The Town should not duplicate or compete with existing recreation programs and services.

All major undeveloped areas in Town should be master planned to include needed public recreational areas and facilities.

Objective

To make recreation areas and facilities accessible and usable by the able as well as the disabled.

Policies

Encourage the provision of access to all recreation facilities through a pedestrian and bicycle trail/pathway system and public transportation. Where feasible provide for public easements to and along waterways, trails, and significant natural resource areas.

Develop on-site "barrier free" recreation facilities with ramps, walkways, accesses, rails, unloading, parking areas, and other amenities designed to accommodate the physically disabled as well as the able-bodied.

Programs

- Existing recreation facilities should be reviewed to see how they might practically or cost effectively be made more barrier free.
- All new plans for areas and facilities should be reviewed to make the facilities barrier free and convenient to the physically disabled.

Objectives

To identify, protect, and preserve significant natural recreation areas and wildlife habitats.

To provide programs that meet the recreation needs of Paradise residents.

Policies

The Town should cooperate with the Paradise Recreation and Park District, the Paradise Unified School District, and other public and private groups to see that desired recreation programs are provided.

The Town should avoid duplicating recreation programs already offered by the Paradise Recreation and Park District.

Objective

To design and develop recreation facilities for optimum use and enjoyment of Paradise residents.

Policies

Where practical, outdoor and indoor recreation facilities should be designed for multiple use.

Night lighting should be provided for areas and facilities to make their use available to significant numbers of people who otherwise could not benefit.

Facilities should be designed to be aesthetically pleasing as well as functional.

Wherever appropriate, facilities should be designed for all age group and participation levels.

Objective

To see that recreation areas and facilities are designed for safety, ease of maintenance, supervision, and discourage vandalism.

Policies

Plans for recreation areas and facilities should be reviewed by public safety (police and fire) representatives to help assure that safety, security, and emergency access are adequately considered and that vandalism is discouraged by the design.

Objective

To provide a system of bike ways, walkways, hiking, and equestrian trails in Paradise and provide appropriate access to, within, and between recreation areas and facilities.

Policies

The Town should develop a circulation plan and maps illustrating bikeways, walkways, hiking, and equestrian trails in and adjacent to Paradise.

The abandoned railway corridor should become the primary north-south parkway corridor for bicyclists, pedestrians, hikers, and equestrian circulation.

The Town should encourage the county, state, and federal agencies to identify and preserve existing hiking and equestrian trails beyond the Town's limits that meet the needs of Paradise residents.

Objective

To develop standards that will help to assure that adequate recreation areas, facilities, and services are provided for Paradise residents. (Suggested standards have been submitted to the Town as a separate document.)

Policy

Cooperate with Paradise Recreation and Park District in formulating recreation standards to serve as the basis for the development of a park dedication ordinance.

Objective

Encourage development of commercial recreation activities, areas, and facilities that will benefit the citizens of Paradise.

Policy

The Town should help identify and support activities and facilities that attract the tourist dollar to Paradise as long as the activity results in a clear net gain for the citizens of Paradise.*

*There is a very strong feeling among many residents that various special events and the proper business atmosphere in Paradise could provide additional recreation activities, employment or visitor dollars to Paradise. Three general approaches are to: (1) develop a theme or atmosphere for Paradise; (2) to have special events, such as art and craft faires, Shakespearian summer theatre or additional summer

and school year productions; or (3) develop outstanding areas or features, such as hiking trails, visitor centers, and the vista area at Bille Park that will attract visitors to these areas.

4.3 SENIOR SERVICES

GOAL: To help provide facilities and senior services through which seniors in Paradise may continue to enhance their well being, meet their needs for services for their general welfare, and through which their experiences, knowledge, and energies can be used to benefit the Town of Paradise.

This element has been developed to help assure that the needs of Paradise Senior Citizens, the largest single populated group of the Town, are addressed. While there are numerous individual senior clubs and groups, there is no overall coordination, facility, source of influence or aid to see that the needs of the seniors are properly addressed. Implementation of this element will serve to correct this situation.

4.31 Senior Services Objectives and Policies

The greatest need of the seniors is a facility that they can regard as their own headquarters for various senior programs.

This facility should have adequate rooms, kitchen, meeting spaces, and outdoor areas to meet varied senior needs. A minimum of three to five acres should be provided. This would provide space or areas for outdoor walks, picnic, and conversation areas.

A senior facility should be master planned in conjunction with a capital outlay program.

While various grants for senior projects are now more limited, due to the unique nature and high population of seniors in Paradise, all potential sources of funding should be explored.

Objective

To provide recreation facilities through which senior citizens may interact, develop skills and meet their social, intellectual, physical, and self-expressive needs.

Policy

Work with senior groups to determine the type of senior facility and area needed.

Program

-Initiate a master plan and a financial plan to design and fund a senior facility.

Policies

Improve walkway access to recreation facilities for senior citizens.

Encourage public transportation access to senior citizen facilities and services.

Program

-Encourage establishment of seniors ride-sharing programs.

Objective

To help provide nutritional programs through which the physical well-being of senior citizens can be maintained or enhanced.

Policy

Work with appropriate organizations to promote a program which meets the nutritional needs of Paradise senior citizens.

Objective

Identify individuals and groups that provide senior services and information.

Program

-Maintain a list of senior servicing agencies and the services they provide.*

*A current list of these groups was developed as a part of this General Plan project and the work of the Senior Service Committee. The list may be annually updated by the seniors and Town staff.

4.32 Interagency Coordination

Investigation by the General Plan consultants indicates that most towns and cities provide senior services in close cooperation with their local recreation departments. The resources and experience of the local recreation district should be utilized as much as possible in initiating and administering Town senior programs. The existing framework and inertia of Paradise Recreation and Park District (P.R.P.D.) can be very useful in program direction, coordination and management. Wherever possible, programs and activities should be coordinated to minimize the cost to the Town, citizens and the P.R.P.D.

4.4 CULTURAL AND HISTORICAL RESOURCES

GOAL: To help provide for the cultural needs and desires of the citizens of Paradise and to preserve and enhance the culture and history of the Town of Paradise.

4.41 The Cultural and Historical Environment

The Paradise area is rich in history and cultural talents and interests. There is great concern that these be shared, enjoyed and appreciated by the

current and future residents of Paradise and the Ridge area. To date, successful musical, art, drama, and other events have been provided to the community through dedicated individuals and groups. Such dedicated people also helped to provide the newly completed Golden Nugget Historical Museum on Pearson Road.

These past successes are a tribute to the individuals and groups that have made them possible. However, the Town and area is sorely lacking in adequate facilities and in continuous leadership and funding to keep these programs going. Facilities and general help are needed to see that cultural programs are provided and supported. Due to the great interest in this area by the majority of Paradise residents and in keeping with State General Plan Guidelines, this element was developed.

4.42 Existing Historical Landmarks

(See Historical Landmarks Map IV-2)

1. "Thankful" Lewis Landmark (sign), Pentz Road and Williams Road (before Butte College)

Landmark to "Thankful" Lewis, only survivor of an Indian attack on herself and two brothers while they were walking to school in 1863.

2. Clear Creek Cemetery Lewis Children Memorial (marker), Clear Creek Cemetery Road (off East Clark Road)

Memorial to James and John Lewis who were captured and killed by the Mill Creek Indians in July, 1863.

3. Elliott Springhouse (structure with plaque), lower Neal Road

In memory of Alexander McClure Elliott 1829-1917, who settled on this site in 1867. Elliott Road was named for this early resident.

4. Sierra Polytechnic Institute (sign), Pearson Road and College Avenue

This institute offered education for 9th through 14th grades so Ridge residents did not have to travel to Chico. Established in 1904, it was the equivalent to two years of college.

5. Skyway and Foster Triangle Park, Skyway and Foster Roads

This park project was dedicated to the community of Paradise in memory of F. E. Jones.

6. Skyway and Elliott Road Triangle Park, Skyway and Elliott Roads

Dedicated to the beautification of Paradise by the Paradise Chamber of Commerce.

7. Southern Railroad Depot Building and the Washington Plaza Memorial Park, Black Olive and Pearson

This depot was built by Southern Pacific in approximately 1903. The Washington Plaza Memorial Park was the area that surrounded the depot. It was created by the community of Paradise and beautified in 1929.

8. Old Paradise Historical Marker (marker), East side of Clark Road and Elliott Road

Commemorates the original business section of Paradise, known in the 1860's as Leonard's Mill. The first community hall, school, church, and post office were located at this site. Then it was by-passed when the railroad was built in 1903.

9. Dogtown Nugget Monument (plaque), Skyway at Inspiration Point, Magalia

This marker symbolizes the discovery of the first large gold nugget in California weighing 54 pounds on April 12, 1859.

10. Magalia Depot Building (site), Skyway and Coutolenc Road

This was built in 1903 on the Southern Pacific Line for lumber and passenger service from Stirling City. Last passenger service was in the 1950's and all log hauling was discontinued in May, 1974, when the Stirling City Mill was closed.

11. Magalia Cemetery (plaque), Magalia Cemetery Road

On July 15, 1973, a plaque was dedicated at the Magalia Cemetery honoring the pioneers who settled Dogtown in 1850 and Mr. and Mrs. John Hupp donors of the land.

12. Eugene J. DeSabla, Jr. (plaque), west side of Skyway near DeSabla Reservoir Dam

Eugene DeSabla was a promoter and developer of the hydro-electric system on the Ridge, which later became P.G.&E.

13. Stirling City Historical Marker (sign), Stirling City

A sign describing the early history of Stirling City and explaining the history of the famous Diamond Match Co.

14. Stirling City Historical Marker (sign), Inskip

The first hotel was built in 1857 by Mr. Kelly. John Stakes purchased the hotel in 1866. It was destroyed by fire in March 1868. The present building was erected later in the same year. The gold strike of the 1850's brought the population to over a thousand making it a booming township.

15. Inskip Pioneer Cemetery (plaque), Inskip

The names on the wooden markers have completely disintegrated with the passage of time. Inscribed on the surrounding fence are the words: Those who rest here are only known to God.

16. Sank Spring (plaque), Chaparral

Dedicated by Jesse Sank, pioneer, to his wife Cornelia Lott.

17. Nimshew Cemetery (plaque), Nimshew

Honoring pioneers of the area, Saul & Rebecca Rugh.

18. Honey Run Covered Bridge (monument), Honey Run Road and Butte Creek

Monument of early pioneering which connects the Honey Run grade with the Humbug Road. It was built for the purpose of providing a shorter route to the mountains as well as a closer access to points of shipping on the Sacramento River. The bridge was erected in 1894 by George Miller.

19. Gold Nugget Museum, approximately 500 Pearson Road

While this building is not an historical landmark, most of the history of Paradise and historical artifacts are located here.

4.43 Churches

According to a composite of Paradise listings, there are nearly 40 churches in the Paradise area.

4.44 Need for Cultural Facilities

The 1979 recreation survey indicated a desire for additional cultural arts programs and classes (art, music, dance, drama, etc.) in Paradise. The Paradise Arts Council, the Town orchestra, Theatre on the Ridge, and other groups have worked earnestly to identify and meet these needs. However, there is a definite shortage of facilities available during school days and a shortage of adequate facilities for cultural performances and productions. Current major musical and dance productions are held in the High School gym or other school or recreation facilities that are, again, clearly inadequate for the performers and audience.

Four types of facilities are currently needed for cultural programs:

1. an auditorium to seat 900 to 1,000 people
2. a more intimate theatre (approximately 300+ seats)
3. an outdoor amphitheatre of theatres for both small group and larger group events
4. rooms or facilities for teaching art, dance, and other classes

As noted in earlier policies, the Town should cooperate with the Recreation and Park District and the School District to see that these facilities are provided.

Policy

Assess the continuing need for cultural-arts facilities and develop a fiscal program to help provide for these needs.

4.45 Arts Council

The Paradise Arts Council (or a new organization that is supported by all cultural groups) should help provide guidance for the development of programs and facilities in Paradise. Such efforts should be supported by the Town and the Recreation and Park District.

Policies

Identify the role and structure of a citizen advisory committee to help facilitate cultural arts in Paradise.

Provide coordination and assistance to these committees as necessary to help develop and maintain cultural facilities and services.

The Town should independently or through the Recreation and Park District provide assistance and recognition to individuals and groups helping to provide cultural and historical programs in Paradise.

4.46 Protection of Historical Areas and Sites

Objective

To help identify, protect, preserve, and enhance historically significant areas, facilities, and artifacts.

Policies

Work with local historical groups to inventory local historical resources and adopt programs to insure the conservation of these resources.

Program

-An official Town committee should be recognized to work with the Gold Nugget Museum and Ridge Historical Society to see that this policy is carried out. The Town should take any appropriate actions to carry out the policy.

4.47 Youth Programs

Policy

Encourage youth involvement and appreciation of the Arts.

4.48 Program Coordination

Objective

To encourage Town-wide coordination of cultural and historical services and events in order to help assure maximum efficiency and effectiveness.

4.49 Library Programs

Objective

To help provide a coordinated library service program whereby children and adults may learn or be exposed to significant literary and musical works.

Policy

The Town should encourage a coordinated program including the Butte County Library and the School District to determine the best program to provide these services for Paradise residents.

4.5 FINANCING METHODS FOR RECREATION AND SENIOR CITIZENS FACILITIES AND PROGRAMS

In an effort to enhance the Paradise Town and/or Paradise Recreation and Parks District facilities and programs, a comprehensive financial plan must be developed and adopted. To aid in this process, at a minimal cost to the area and citizens, many methods of funding for acquisition and development are available. A list of funding methods is on file in the Planning Department.

4.6 ARCHEOLOGICAL RESOURCES

The Paradise area contains a variety of significant archeological resources, many of which have already been lost or damaged due to prior development in the community. It is important to be aware of the archaeological sensitivity of the area and attempt to preserve the resources still existing.

Archaeologists consider a number of factors when determining the probability of finding archaeological sites within an area. The higher this probability is in any given area the more archaeologically sensitive the area is considered to be. Such factors as the availability of water, the degree of land surface slope, the direction of the slope, the elevation, the natural vegetation, and the area's geographic features are considered in determining the sensitivity of an area. High sensitivity is not an absolute assurance that sites exist, but is a good indication of where sites are most likely to be found.

The Paradise area is especially sensitive. The area is predominantly a foothill-woodland vegetation zone which has an abundance of acorns, seeds, roots, animal life, and other easily exploitable resources. The area is dissected by streams and contains springs and many small water drainages. The volcanic nature of the area creates natural rock shelters favorable for human habitation and furnishes bedrock outcroppings for seed grinding utilization. Paradise also has many flat or slightly sloping areas which could have been used for seasonal occupation. The primary ecologic zones with the greatest archeological sensitivity are 1) the drainage courses and basins,

2) the upper canyon rims to the east and west of the Town, and 3) the ridge flats and meadowlands to the south, especially in better-watered areas and sites with thick groves of oaks.

In this area the existence of both prehistoric Native American sites and historic Euroamerican sites used after 1850 AD must be recognized. The Concow Indians, a branch of the larger Maidu group inhabited the area until historic times. The Concow did not occupy a single site throughout the year, but moved seasonally to exploit the available resources. In the spring they travelled into the valleys to collect seeds and grasses, while in the summer they climbed to higher elevations to hunt, fish, and gather nuts. They generally spent the winter on river ridges. The Concow constructed semi-subteranean structures, covered with earth and bark for ceremonial and occupational use. They also constructed smaller roofless structures for summer use.

Acorns were a staple food of the Concow and they preferred the Black Oak, the Golden Oak, and the interior Live Oak to most other acorn sources. The acorns were ground into flour by pounding with an oblong rock pestle on a larger rock. The continued grinding caused a smooth rounded depression or mortar to be formed. The natural bedrock in the area was often used for acorn grinding, and mortars located therein are referred to as bedrock mortars. Hunting and fishing were also practiced to supplement the food supply. Fish were caught with the aid of nets. Rabbits, deer, birds, and ducks were among the animals hunted.

In the Paradise area archaeologists expect to find remnants of the Concow's activities. There are many types of sites recorded in the area, including village sites, seasonal occupation sites, burial grounds, rock shelters, bedrock mortars and lithic scatters (arrowpoints, cutting stones, tools, etc.). At these sites cultural resources such as food processing implements (mortars and pestles), lithic waste flakes from tool manufacture, hunting tools, and other tools are some of the materials one might expect to find. Features which may be present include burials, bedrock mortars, and circular remains of house-pits and dance houses. In the Paradise area, most of the sites recorded are rockshelters and bedrock mortar sites.

Beginning around 1850 AD there was an influx of Euroamericans into the area. These early inhabitants carried on activities such as gold mining, cattle ranching and logging. Their settlements were generally small and close to the area they exploited. Material remains associated with these activities can be expected to exist in the area, such as early mining equipment, stove parts, bottles, cans, square nails, and foundations. Preservation

of these artifacts, also, is necessary for studying and understanding the early cultures of this area.

The Information Center of the California Archaeological Inventory, housed on the California State University, Chico campus, should be contacted with the plans for any discretionary project before any alterations to the environment occur. The Regional Information Center is funded and regulated by the State Historic Preservation Office. This office seeks to preserve cultural resources and California's heritage. The Regional Information Center will review the project and conduct a record search to determine if there are any archaeological sites known to exist within the project boundaries. The office will also assess the sensitivity of the area to determine whether there is a possibility of unrecorded cultural resources located within the project area. If the area is determined to be highly sensitive, a survey should be conducted by a qualified archaeologist. The Regional Information Center has a list of qualified people who can be contacted to do archaeological work. If no cultural resources will be impacted by the project, and it is of low archaeological sensitivity, then it is given clearance. If cultural resources will be impacted by the project, then proper measures must be taken to assess the significance of the cultural resources. The preservation of these cultural resources is the most important consideration. If this is not possible, the area should be evaluated further for significant and appropriate mitigation measures.

All drainage courses (indicated in the Natural Resources section), wooded areas with available water, and canyon rims are considered archaeologically sensitive. Many sites are already known to exist. Appendix E contains a list of designated sites coded by elevation. The precise location is kept on record within the California Archaeological Inventory. Should a property owner suspect his area may potentially contain a site and it lies at one of the listed elevations, he/she should contact the information center at Chico State. Also, if any evidence of Native American occupation or site use is found by property owners, the Information Center or Chico State Archaeology Department should be contacted.

4.61 Archeology Objectives and Policies

Objective

To protect and preserve archaeological resources for their cultural, education and scientific values, and especially for their value as local heritage.

Policies

Declare that major archaeological resources are to be protected until they can be evaluated and prohibit any disturbance of Native American cultural sites without an appropriate permit.

Encourage the inventory, assessment, and mapping of suspected archaeological sites and archaeologically sensitive zones brought into the Town through the annexation process.

Require an archaeological site survey for all development proposals resulting in ground disturbance within known sensitive sites or zones of the Town of Paradise as designated on maps filed with the Town Planning Department.

Protect known archaeological resources from development by restricting grading and improvement activities to portions of the property not containing these resources.

Require development proposals for any archaeological site to provide an evaluation, by a professional archaeologist, of the significance of the resources and the nature of the protective measures which might be necessary for their protection.

Program

-Develop a system whereby the archaeological site survey process can be undertaken with the necessary dispatch to ensure appropriate scientific appraisal as well as within a time frame which assures maximum protection to the individual land owner or developer.

Section V

Environmental Quality

ENVIRONMENTAL QUALITY

OVERALL GOAL: Preserve and enhance the natural environmental resources of Paradise including its forests, open spaces, quiet, clean air and water, and rural atmosphere.

PARADISE ENVIRONMENTAL QUALITY

The environmental quality of Paradise is of paramount importance to Town residents. The General Plan Citizen's Attitude Survey, as well as earlier studies completed by M.A.C., California State University, Chico and others, in addition to ongoing citizen input, all reflect an over-whelming desire for a natural, healthful environment.

Frustrating, undesirable or unsafe environments in urban settings provided the impetus for many of the non-native residents to move to the Ridge area. Here they have joined with long-time residents to seek a quality of life that opposes the activities, congestion, and type of development, usually replete with visual, air, and sound pollution, found in most cities.

While there are individual and small-group differences in lifestyle and activity preferences, most residents desire to retain and experience the beauties and serenity of nature, open space, clean air, and other such qualities they associate with the "good life" or "paradise." It is toward these most meaningful ends that the goals, objectives, policies, and implementation recommendations regarding environment are directed.

5.1 AESTHETIC QUALITY

Goal: To protect, preserve, and enhance the natural and man-made aesthetic qualities which combine to create the setting, atmosphere, character, and visual experience of Paradise.

5.11 The Perceived Environment

Of all environmental concerns, the visual quality of Paradise is most apparent and currently of most concern to both Paradise residents and visitors. Residents strongly object to certain stress creating development and sights both at the entrance to the Town and along the major commercial roadways. They desire that, as possible, these situations be improved and that new development be visually pleasing and in keeping with the desired community environment.

Some existing developments reflect a common commercial mindset that the more noticeable the development (in color, signing, lighting, display of products, etc.), the more customers notice and patronize the facilities. This thinking does not hold true in Paradise where people generally shop for price and quality. Gaudy on-site advertising leads to visual blight of Paradise

streets and neighborhoods and is marginally useful in attracting customers.

Consistent with the desires of similar communities for satisfactory visual qualities, residents also object to more temporary undesirable views that infringe on the value of neighboring properties and the community as a whole. Trash, garbage, immobile vehicles, trailers, and other such materials and equipment are not desired in front yards and along the streets of Paradise. In general, it is desired that all new development, public and private, maintain the integrity of the area.

Finally, residents' desire to retain the remaining aesthetic and scenic assets of the community must be fulfilled. The trees, scenic roadways, views, vista points, and the spectacular natural beauties of the canyons that border Paradise must be preserved. It is toward these desirable ends that this element is directed.

5.12 Scenic Roadways

Objective

To identify, preserve, and develop scenic roadways in the community.

Policies

The Town should study and encourage maintenance of a scenic road system within the Town.

Protect and enhance scenic roadways to assure that they help provide a pleasant natural or rustic appearance consistent with the natural character of Paradise.

Designated scenic roadways should be left natural in appearance. Such roadways would be free of commercial developments, signs, and other unnatural or unscreened improvements.

Programs

- Designate Pentz Road as a scenic corridor
- Designate HoneyRun Road within the Town limits as a scenic roadway.
- The Town should establish a Design Review Committee whose responsibilities would include review of building, signing, landscaping, and lighting standards which may be applied to new development along the Skyway, Clark, and Pearsons Roads and other appropriate areas.

5.13 Areas of Natural Scenic Beauty

A study of natural scenic areas in and adjacent to Paradise reflected that most of the areas within the Town limits have been developed. However, a few small areas remained along with major areas in the canyons to the south, east, and west. The areas in Town, except for part of Bille Park, are privately owned. Such properties are: (1) a wildlife sanctuary owned by Mr. Tom Rogers

et al, at the end of Rivendell Lane; (2) an area at the south-east end of Valley View Drive that includes both a trail (shown on the trail map) and natural beauties and wildlife; (3) natural areas and trails on the Town property at the end of Circle Lane; (4) the abandoned Southern Pacific Railroad way; (5) the northwest portion of Bille Park; and (6) the Feather River Hospital Nature Trail. Smaller private parcels are scattered throughout the Town. The six areas noted and accesses to these areas should be mapped. Future development in Paradise should not jeopardize the access to natural or scenic values of these areas.

Outside of the Town limits but within what would normally be the "sphere of influence" of Paradise are various areas of outstanding natural beauty currently enjoyed by Town residents. These include: (1) areas along the west and little west branches of the Feather River (West Feather River Canyon); (2) areas along Butte Creek and middle Butte Creek (Butte Creek Canyon); (3) the abandoned Southern Pacific Railroad right-of-way from Paradise to Stirling City; (4) various scenic trails; and (5) various P.G.&E. rights-of-way and Forest Service and BLM properties.

Objective

To identify and preserve areas of natural scenic beauty in and adjacent to Paradise.

Policy

Encourage the inventory and mapping of areas of natural scenic beauty in and adjacent to Paradise.

5.14 Viewsheds

Viewsheds are a valuable resource for ridge residents. The foothills provide an excellent view of the valley expanse. Most of the possible views of the canyons have been blocked in the same way that early development along beaches blocked public view and enjoyment of these areas. The remaining limited viewsheds are a valuable environmental asset to the community and should be preserved.

Policy

Identify and preserve scenic areas and viewsheds including:

1. The lookout area-vista point over Butte Creek Canyon two miles below Paradise on the west side of Skyway.
2. The area to the north and west of Bille Park overlooking Little Butte Creek Canyon.
3. The vista point overlooking the West Branch of the Feather River just north of the intersection of Pentz Road and Skyway.
4. A vista point or area off Canyon View and Garden Drive on the east boundary of Paradise.

5.15 Aesthetic Design Policies

Policies

Provide for physical development in the Town that does not degrade or detract from the Town's natural aesthetic quality.

Work toward correcting existing physical developments that are not in harmony with the natural visual qualities desired in Paradise.

Provide for aesthetically pleasing industrial and commercial areas through guidelines for design and landscaping.

Provide for aesthetically pleasing development of neighborhood, residential, and other non-commercial areas.

Programs

- Develop guidelines for physical development that will preserve and protect the Town's natural aesthetic quality and character.

- Establish a Design Review Committee to formulate standards and recommendations to achieve improved site visual aesthetics (See Regulatory Devices Section).

5.16 Improper Disposal and Maintenance

An ongoing problem in Paradise has been the degradation of the visual environment of residents and the general population by those who downgrade the area by (1) accumulating offensive trash, junk, weeds/plants or other materials or debris in yards; (2) parking of inoperable vehicles in the front of homes; or (3) offensive signs, lights, etc., in yards or on houses.

Policy

Prevent, minimize, and correct temporary aesthetic problems in Paradise that are offensive or infringe on others "enjoyment and quality of life" in Paradise. (Trash, junk, dumping, inoperable vehicles, offensive signs, lights, etc.)

Program

- Prepare public information programs to encourage proper disposal and storage of excess vehicles or materials and discouragement of littering.

- Prepare an ordinance to enforce the Town policy on improper waste disposal and property storage.

5.17 Corridors

The environment of Paradise is most characterized by linear, north-south corridors. Its drainage systems, canyons, boundary rims, and flanking Little Butte Creek and Feather River all are responsible for much of the natural beauty of the Town. They have all been preserved because of the difficulty of urban development.

The same is true of the Southern Pacific right-of-way. Due to historical activities and environmental factors, it has been left as an undeveloped open space corridor running north-south through the Town's center.

All the scenic corridors in and adjacent to the Town should be preserved if the scenic qualities of the Ridge are to be retained. Urban development in any of these corridors will diminish the value of the residential environment and destroy the natural ecology of the Ridge.

Policies

Preserve the open space and visual aesthetics of the natural corridors of Paradise.

Identify and preserve scenic waterways, in and adjacent to Paradise for their scenic, wildlife, and recreation value.

Preserve the abandoned Southern Pacific Railroad right-of-way as a scenic, natural circulation corridor through Paradise.

5.2 NOISE ELEMENT

Goals: To provide sufficient information concerning the community noise environment so that noise may be effectively considered in the land use planning process. This establishes the necessary groundwork to develop a community noise ordinance that may be utilized to resolve noise complaint situations.

To develop strategies for abatement of excessive noise exposure situations involving implementation of cost-effective mitigating measures in combination with rezoning as appropriate to avoid incompatible land uses.

To protect those existing regions of the study area whose noise environments are deemed acceptable and also those locations throughout the community deemed "noise sensitive."

To utilize the definition of the community noise environment, in the form of CNEL or L_{dn} noise contours as provided in the Noise Element for local compliance with the State Noise Insulation Standards. These standards require specified levels of outdoor to indoor noise reduction for new multifamily residential constructions in areas where the outdoor noise exposure exceeds CNEL (or L_{dn}) 60 dBA.

Purpose

The noise element of the General Plan provides for comprehensive local programs to control and abate environmental noise and to protect the public from excessive exposure to noise. The purpose of the survey has been to achieve these objectives.

5.21 Ambient Levels

The noise survey identifies ambient noise levels throughout the Town of Paradise at different hours of the day, as well as any stationary sources of excessive noise. Measurements of noise levels on calibrated devices are utilized to determine the CNEL or Community Noise Equivalent Level. This is an average of sound levels taken during a 24-hour period. Additional weighting is used for nighttime noise levels to compensate for the intrusiveness of noise generated at night. Noise measurements were also made at noise sensitive locations including the Feather River Hospital and schools. The unit of measurement is the decibel a-weighted (dBa). This measures noise at frequencies comparable to normal hearing range. Each time the intensity of a sound is doubled, there is an increase of three decibels, and each time the intensity is multiplied by 10, there is an increase of 10 decibels. Most people judge each increase of 10 dBa to be twice as loud. In Paradise, the noise levels were measured on a Scott Instrument Laboratories Model 451, which meets the requirements of ANSI Standard S1 4-171 for Sound Level Meters.

The CNEL for the Town of Paradise has been estimated to be 48 dBa based on noise measurements taken in June, 1981. This value is compatible with the land use planning described elsewhere in the General Plan. The major contributor to the CNEL are the highways and roads of Paradise. Vehicular traffic generates noise levels much higher than the ambient levels existing adjacent to these roadways.

Ambient noise levels throughout Paradise were on the level of 45 dBa during daylight hours for areas away from high volume roadways. The ambient levels after 10 p.m. were between 35 dBa and 45 dBa.

5.22 High Volume Roadways

Traffic surveys have indicated that the Skyway, Clark Road, Pearson Road, Elliott Road, Wagstaff Road, and the Pentz-Magalia Highway carry a high volume of vehicular traffic during daylight hours. The Skyway also carries most of the Town's high-speed nighttime traffic. For the purpose of the noise survey, these roads have been designated High Volume Roadways. In the vicinity of the Central Business District (CBD), these roadways are four lanes wide. The noise level adjacent to these roadways has been measured in noise contours. Guidelines prepared by the Office of Noise Control for the State Department of Health suggest noise levels of L_{dn60} (the day-night noise level average of 60 dBa) or higher be identified (See Tables V-1, V-2). Roadway noise levels can be indicated by noise contour lines (Figures V-1 and V-2). For four-lane high volume roadways such as the Skyway or Clark Road, the L_{dn60} contour is

Table V-1
LAND USE COMPATABILITY FOR COMMUNITY NOISE ENVIRONMENTS

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L _{dn} OR CNEL, dB						INTERPRETATION
	55	60	65	70	75	80	
RESIDENTIAL – LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES							 NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
RESIDENTIAL – MULTI. FAMILY							
TRANSIENT LODGING – MOTELS, HOTELS							 CONDITIONALLY ACCEPTABLE New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES							
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES							 NORMALLY UNACCEPTABLE New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS							
PLAYGROUNDS, NEIGHBORHOOD PARKS							 CLEARLY UNACCEPTABLE New construction or development should generally not be undertaken.
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES							
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL							
INDUSTRIAL, MANUFACTURING UTILITIES, AGRICULTURE							

CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE

A. NORMALIZED NOISE EXPOSURE INFORMATION DESIRED

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L_{dn}. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L_{dn}.

B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act, residential uses located in Com-

munity Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally unacceptable areas.

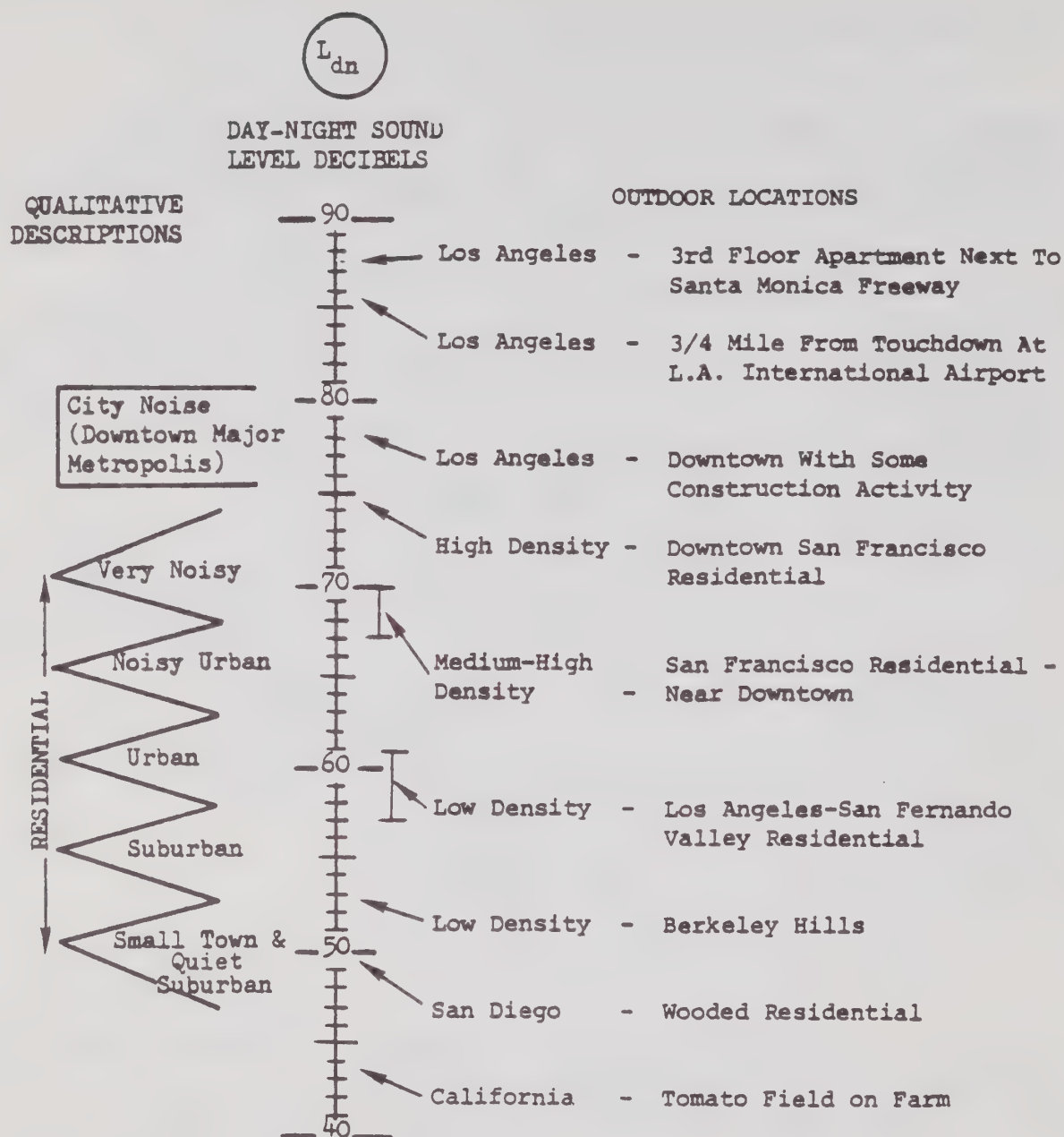
C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L_{dn}. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Table V-2



RANGE OF TYPICAL OUTDOOR NOISE ENVIRONMENTS
EXPRESSED IN TERMS OF DAY NIGHT SOUND LEVEL (L_{dn}), dB

FIGURE V-1
NOISE CONTOURS
TWO LANE ROADWAY

Roadway Center Line	Distance
(Outside traffic lane)	0'
	85 dBa 15'
	80 dBa 30'
	75 dBa 45'
	70 dBa 60'
	65 dBa 75'
	60 dBa 90'

Daytime Noise Contour for High Volume Two Lane Roadway (Intrusive Noise)

FIGURE V-2
NOISE CONTOURS
FOUR LANE ROADWAY

Roadway Center Line	Distance
(Inside traffic lane)	0'
(Outside traffic lane)	15'
	85 dBa 30'
	80 dBa 45'
	75 dBa 60'
	70 dBa 75'
	65 dBa 90'
	60 dBa 105'

Daytime Noise Contour for High Volume Four Lane Roadway (Intrusive Noise)

approximately 105 feet from the roadway centerline or roughly 70 feet back from the roadway curb or shoulder.

The L_{dn60} for two-lane high volume roadways is 90 feet from the roadway centerline. This is roughly 75 feet from the curb or shoulder. Daytime values for both two-and four-lane roadways are significantly higher than the day-night averages.

5.23 Vehicular Noise

The majority of vehicles on Paradise's high volume roadways are passenger vehicles. Newer automobiles generate lower noise levels than older models. Many noisy automobiles can be heard on the roadways of Paradise. This is a function of vehicle age and the condition of the vehicle's muffler system. Paradise has many recreational vehicles, including pick-up trucks with off-road tires, that generate a much higher noise level than passenger vehicles. At higher speeds this tire noise can be heard above other traffic sounds at distances of more than 500 feet from roadways. Large trucks and truck-trailer combinations are part of the Town's traffic noise but are not noticed in high volume (none of Paradise's roadways are through connectors to other large population centers). Logging trucks were not observed at a significant volume during the study period. The most intrusive noise source was the typical pick-up truck with off-road tires. Noise levels for these vehicles at roadside can exceed 85 dBa frequently. Late-model passenger vehicles generate noise levels of 70 to 75 dBa at the same distance.

Two patterns of traffic noise can be observed which are essentially a function of vehicle speed and frequency of vehicle appearance. On lower Clark Road at the western Town limits, vehicles appear at intervals of up to one minute during day-light hours. These produce a high noise level frequently exceeding 80 dBa. The ambient or background noise level at these locations may be as low as 55 dBa at the roadway shoulder in the absence of vehicular traffic. At high volume intersections such as the Skyway at Center Street, the ambient level may be as high as 65 dBa but the slower-moving vehicular traffic may reach levels of only 70 to 75 dBa. Here the traffic volume is nearly continuous during the day.

5.24 Noise Sensitive Areas

The Feather River Hospital, schools, nursing homes, and cemeteries are considered noise sensitive areas. Measurements have been recorded at noise sensitive areas in Paradise (Table V-3). Most facilities in this category have sufficient setback from the roadway to be beyond the L_{dn60} noise contour. The only exception noted was Paradise Elementary School on Pearson Road.

Daytime noise levels from road traffic averages 60 dBa at the front of the building nearest to Pearson Road. Classrooms with windows facing the roadway are in this building.

TABLE V-3
NOISE SENSITIVE AREAS

	<u>Ldn</u>
Memorial Park	60 dBa
Ponderosa Elementary School	55 dBa
Paradise Elementary School	60 dBa
Paradise Intermediate School	50 dBa
Paradise High School	50 dBa
Paradise Cemetery	55 dBa
Feather River Hospital	50 dBa
Cypress Acres Convalescent Hospital	45 dBa
Town Hall	60 dBa
Neal Road	60 dBa

5.25 Noise Complaints

The Public Safety Department of Paradise and the Butte County Environmental Health Department have no record of complaints of excessive noise which would exceed the $L_{dn}60$ dBa standard. There are no stationary noise sources in Paradise which could be expected to exceed the $L_{dn}60$ level. There are no railroads or airports within the Town limits.

5.26 Upper Skyway and Clark Road

Numerous residential dwellings include permanent structures and mobilehomes, are adjacent to the two-lane portions of the upper Skyway and Clark Road. There are approximately 60 residential dwellings on the Skyway from north of Bille Road to the upper Town limit. Also adjacent to the roadway are a mobilehome park and a convalescent home. On upper Clark Road, between Wagstaff Road and the intersection with the Skyway, there are approximately 85 dwellings and a nursing home. Many of these dwellings are set back 75 to 100 feet from the roadway. The $L_{dn}60$ contour for these two-lane roadways is considered to be 75 feet from the roadway centerline. Widening of these roadways to four lanes would move the $L_{dn}60$ contour approximately 15 feet closer to these dwellings and facilities. (The noise level inside a typical dwelling on upper Clark Road 90 feet from the roadway was measured at 50 dBa with the windows adjacent to the roadway open.)

5.27 Neal Road

Even though it is only two lanes and transects only a corner of the Town, Neal Road should be considered a major arterial in terms of noise impact. The night ambient noise level may be comparable to other major arterials in the Town. But the daytime levels rise significantly to equal the Skyway at peak noise periods. This is a function primarily of the extensive light and heavy truck traffic enroute to the landfill on lower Neal Road near Highway 99. Fortunately, the loaded trucks going to the landfill traverse a down-grade which somewhat reduces the noise level. Noise levels for unloaded trucks returning up the grade often exceeded the 90 dBA at roadside points on Neal Road from the lower Town limit to its intersection with the Skyway. Setback regulations should be enforced for new development along this road. Use of noise attenuating vegetation should be encouraged at roadside. Many sections of Neal Road are devoid of vegetation, including trees, compared to other major roads. This allows noise to extend further from and along the roadway.

5.28 Summary

The major noise source in Paradise has been identified as motor vehicles. Pick-up trucks with off-road tires are significant contributors to vehicular traffic noise in Paradise. Noisy muffler systems also contribute to the noise.

Certain roadways within the Town have been identified as high volume roadways. Land adjacent to these roads is affected by higher noise levels. Road widening projects increase traffic volumes and related noise levels and place existing structures in closer proximity to noise sources. The 60 dBA contour is considered excessive for single family residential areas and multi-family residential uses unless multi-family dwellings are adequately insulated from noise.

5.29 Mitigating Measures

There are measures which can be taken to mitigate adverse noise impacts. One method is land use management of the corridor. Single family uses along Clark and Skyway will no longer be appropriate when additional traffic lanes and shoulder improvements are made. Expansion of the 60 dBA contour will envelope most of the single family homes resulting in unacceptable noise levels. Zoning which permits higher densities with performance standards designed to mitigate noise impacts, can help mitigate the adverse effects of noise. Performance standards may include requirements for providing noise berms, dense vegetation, fencing, and setbacks.

Policies

Land uses adjacent to high volume roadways should be compatible with higher noise levels.

As noise contours expand from widened roadways mitigation measures should be implemented to protect the converted roadway environments to the greatest extent feasible.

Noise sensitive developments and public facilities should be directed away from high volume roadways.

Programs

-Provide for zoning along high volume roadways which incorporates appropriate uses and performance standards designed to mitigate noise impacts.

-Adopt a noise control ordinance based upon the model prepared by the Office of Noise Control of the California Department of Health.

5.3 AIR QUALITY

The presence of clear mountain air has been mentioned often as the decisive basis of many individuals to reside in the Paradise area. This aspect of air quality relates to the desirability of both clean air and an atmosphere which is conducive to maintaining the "viewsheds" of the area. Polluted air is both unhealthy and unsightly; however, a consideration of air quality should not be based upon the premise of removing all pollutants as from the atmosphere but rather the maintenance of an atmosphere as free as possible from the emission by-products of the human cultural environment. This policy is especially necessary in Paradise since local meteorological conditions are often favorable for the build-up of pollutants and low rate of dispersal.

The maintenance of clean air is a primary goal of the Butte County Air Pollution Control District which is a portion of the Sacramento Valley Air Basin. This district has the responsibility for monitoring and regulating the emissions from stationary sources within Butte County. The majority of these sources are related to forestry activities, agriculture, and mining operations. Particulate matter is the primary pollutant from these activities and considerable effort is devoted by the district to the campaign to control such emissions. Pollutants from vehicles is also a major source of air pollution in Butte County and preliminary monitoring indicates that such vehicular emissions may be the major source of decreasing air quality in the Town of Paradise. The pollutants from this source are such non-particulates as carbon monoxide, nitrogen dioxide, and oxone. Both particulates and gaseous emissions can operate in a polluted atmosphere to markedly decrease air quality. Consideration is given in this Plan to activities which could potentially produce

and/or concentrate both types of primary atmospheric pollutants. In many instances, sound planning decisions regarding land use, transportation, and housing can also have quite favorable impacts on maintaining positive air quality within the Town of Paradise.

Objective

To maintain and improve the air quality of the Town of Paradise by regulating, restricting, and eliminating sources of air pollutants in order to meet County, State, and National ambient air quality standards; to protect Town residents from the health hazards of air pollution, and to prevent degradation of the scenic character of Paradise due to air pollution.

Policies

Encourage the concentration of commercial development in designated centers that may more easily serve the air quality function of diminishing the spread of maximum use highways.

Encourage the concentration of heavier industrial activities to designated centers peripheral to the Town.

Encourage high density residential development in areas where it is adjacent to major access routes, near commercial centers, where it can be served by public transit, and in areas where pedestrian access is possible.

Emphasize public transit, bicycles, and pedestrian modes of transportation rather than automobile use.

Maintain appropriately vegetated and forested areas along Town streets and in yards along roadways wherever possible in order to maximize the pollution filtering properties of such vegetation.

Continue to support air quality monitoring facilities and air pollution control strategies in concert with the State of California and the Butte County Air Pollution Control District.

Encourage less polluting transportation alternatives through the construction of bikeways and the provisions of public transit.

Promote control of aerial spraying of pesticides and fertilizers in order to prevent contamination to adjacent areas.

Ensure that agricultural and forestry burning practices are in accordance with State and local laws and ordinances, and permit open burning of debris only by permit and in instances where alternate disposal methods are not feasible.

Closely monitor all industrial and manufacturing activities and require them to utilize the best available emission procedures in order to protect air quality

Program

-Develop a program to ensure that forestry wastes are mechanically chipped rather than burned where such activity is feasible and prudent in a disease control process.

5.4 DOMESTIC WATER QUALITY

Water quality has been a major concern in the Paradise area for a number of years. This problem was first approached by the State Health Department in the 1960's. At this time it was determined that bacteria and viruses incased within the sediment particle were being shielded from chlorination thus posing a potential health hazard. It was determined that the particulate matter within the water could be filtered out, by a filtration plant, thus removing potentially harmful bacteria and virus.

The proposed filtration plant was estimated at costing 7.4 million dollars at the time of the 1980 elections. If the funding had been approved, the increase in the cost of water to users within the PID boundaries would have changed from approximately \$3.50 per month to approximately \$10.50 per month. No cost estimates have been generated to show the cost of building the filtration plant, if approved, at a later date.

Objective

To cooperate with water service districts in protecting and managing the existing and future water supplies of the Town of Paradise in order to preserve the quality of water produced and stored for this area and to meet the needs of Town residents, local agriculture and forestry, local industry and the natural ecosystems.

5.5 GROUND WATER QUALITY

Pollution of the ground water table has also been a serious problem in Paradise. Inefficient on-site waste disposal has caused widespread failure of septic tanks threatening human and animal health. The problem has not affected water supplies distributed by the Irrigation District however, since its sources are outside the urban area. Many local shallow wells which were dug long ago and which may still have limited use are threatened, however, Under no circumstances should these wells be sources for human or animal water use.

Policies

Continue the program of monitoring well sites for the purpose of determining the appropriate levels of bacteria and dissolved solids.

Continue to require surveys of the appropriateness of on-site waste disposal for all new development projects

Oppose new or expanded developments in critical water supply basins and along identified drainage courses.

Prohibit land divisions or development activities except water-oriented uses, within proposed reservoir sites.

Allow timber harvesting only under sustained yield programs and with restrictions or careful regulations regarding winter operations and other conditions designed for watersheds protection and erosion control.

Require all grading, building, and timber harvesting to meet strict standards for erosion control and protection of water quality.

Require the retention of stormwater runoff from impermeable surfaces for all new development projects so that surface runoff will not exceed pre-development levels.

Require uses in watershed areas to be compatible with watershed protection and be limited to open space uses or recreational and residential uses at specified watershed densities unless otherwise exempted.

Programs

-Monitor surface water quality and its ability to warn of potential problems. (A study is presently being undertaken by Montgomery Associates. Their recommendations should be incorporated within the Plan.)

-Establish a program for septic tank inspection and maintenance, giving a high priority to areas of older development, areas in low percolation soils, and areas adjacent to reservoirs and drainage courses. (See Sewerage Disposal Policies.)

-Encourage property owners in watershed areas to sign open space easement contracts

Section VI

Housing

HOUSING

STATE
HOUSING
GOAL "The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order."

PARADISE
HOUSING
GOALS Secure housing stock large and varied enough to provide Paradise residents of all ages, races, incomes and family sizes with housing which is safe, sound, sanitary and weather-tight and which has adequate space, light, heat ventilation, plumbing, and cooking facilities.

Achieve living environments which do not endanger the health, safety and well-being of Paradise residents and which provide adequate privacy, quiet, security, and visual quality.

Housing fulfills a central role and need of society. It not only fulfills the basic needs of security, space and privacy, but is important in our social structure, economic system and development patterns, providing a sense of place a social identity. The early attainment of these goals requires the cooperative participation of both the public and the private sector, the coordination of efforts by all levels of government and, most importantly, recognition by cities and counties of their responsibility to use their legally-vested powers to help fulfill local and regional housing needs.

6.1 HOUSING DEMAND

6.11 Population Growth

An analysis of Paradise's housing needs must first assess the recent population increases in the Paradise area and estimate future growth. In Table VI-1, population estimates based on census figures are presented by every census year from 1930 for the current Town boundaries and for the entire Eden Ridge market area. Projections of recent growth trends result in the estimates shown for 1985 and 1990 (See also the discussion of population characteristics within demography portion of Community Development section).

All population figures are estimates developed by the consultant from

results of complete censuses. The 1975 estimates are from the special census sponsored by Butte County and conducted by the State Finance Department. All other estimates are from Federal Censuses. The 1980 estimates are based on the partial census results available at this time.

The Paradise "market area" used below includes Lime Saddle, Magalia, Paradise Pines, DeSabra, Lovelock, Stirling City and Inskip, and does not include Butte Creek Canyon, Forest Ranch, Butte Meadows, Concow, Yankee Hill, Pentz, or Butte College. Totals for the 1930, 1940, and 1950 censuses were reported for the Kimsheew Judicial Township. Totals for the 1960, 1970, and 1980 Censuses were reported for the "Paradise Census County Division." Totals for the 1975 special census were reported for the Paradise High School District.

As used here, the Paradise "town area" is the area within the boundaries of the Town of Paradise at the time of incorporation, November, 1979. Federal census reports did not designate an "unincorporated place" of Paradise until the 1960 census. The 1960 boundaries excluded much of the southeastern portion of the urban area. The 1970 boundaries for the Paradise "unincorporated place" excluded some small portions of the urban areas, but included portions of the Lime Saddle and Magalia areas outside incorporation boundaries. The 1975 special census reported totals for the Paradise Irrigation District, an area slightly smaller than incorporation boundaries. The 1980 census figures are the first totals reported by the actual boundaries of the Town of Paradise.

The rapidity of Paradise's growth is shown even more clearly when compared to regional and State figures. While Butte County and the State of California grew about 76% and 50% respectively during the 1960-1980 period, the population within the Town of Paradise grew 137% and the population of the entire market area increased 174%.

The consultant's estimates for 1985 and 1990 are a result of comparisons of several types of mathematical projections of past figures with estimates of holding capacities at various densities. Future estimates are based on assumptions that future growth will reflect recent trends and that future development will not be greatly constrained by the lack of sewers and treated water, or by governmental action. Complete buildout of various portions of the market area may occur during the general planning period, if the above types of constraints are not dominant and interest rates are conducive to development. Migration from metropolitan areas could accelerate if such areas suffer major disasters or significant increases in pollution or crime.

Table VI-1

POPULATION GROWTH OF THE PARADISE AREA

<u>Census Year</u>	<u>Market Area Population</u>	<u>Increase</u>	<u>Town Area Population</u>	<u>Increase</u>
1930	2,000	--	--	--
1940	3,600	80%	--	--
1950	7,300	103%	--	--
1960	11,119	45%	9,750	--
1970	16,912	52%	14,539	51%
1975	22,169	37%	19,239	35%
1980	28,500	74%-27%	22,571	58%-17%
1985	35,560	20%	25,890	17%
1990	40,700	41%-17%	28,580	32%-12%

6.12 Personal Characteristics

With a median age of about 49 in 1975, and 28.9% of the residents 65 years or more in age, the Town of Paradise has one of the oldest aged populations of cities in California, and certainly in Butte County. Although the Paradise median has not increased since 1960, the California Finance Department expects statewide median ages to continue to increase gradually in the 1980's as the "baby boom" ages, as previous in-migrants reach retirement, and life expectancy increases. Age characteristics are presented in Table VI-2.

Two local trends appear to be significant from the data in Table VI-2. First, the proportion of adults in the "working ages" (18-64) increased significantly between 1970 and 1975 within the Town itself, a possible reflection of an increased proportion of services being provided locally. Also, the median age within the Town seems to be dropping due to increasing migrations of younger persons and child-bearing aged adults. The growing employment base of the now large populated area has been largely responsible. However, the median age and proportion of elderly in the entire market area has increased steadily, apparently accompanied by a relative drop in the younger ages. These figures indicate a significant difference between the Town's population and that of the remainder of the market area. This difference may be partially explained by the development and increasing occupancy of the Paradise Pines subdivisions since 1970 by almost exclusive retirement population and the closing of a lumber mill in Stirling City in 1974.

Table VI-2

GENERAL AGE CHARACTERISTICS

Year	<u>Market Area</u>				<u>Town Area</u>			
	<u>0-17</u>	<u>18-64</u>	<u>65+</u>	<u>Median</u>	<u>0-17</u>	<u>18-64</u>	<u>65+</u>	<u>Median</u>
1960	23.5%	50.9%	25.6%	48±	22.8%	49.1%	28.1%	51±
1970	23.3%	48.8%	27.9%	49.4	22.5%	47.4%	29.8%	51.3
1975	19.5%	50.5%	30.0%	50±	21.0%	50.1%	28.9%	49±

TOWN OF PARADISE

	<u>0 - 19</u>	<u>20-39</u>	<u>40-59</u>	<u>60 +</u>	<u>Mean</u>
1980*	20.7%	22.1%	17.7%	39.5%	45.2

*Citizen's Attitude Survey Estimates

Very few Paradise residents would be classified as non-white in racial-ethnic background. Like many other communities in rural areas in northern California, the proportions of blacks, American Indians and the various Asian ethnic groups are very low. However, it is obvious from the figures in Table VI-3 that the "minority" population has grown considerably, from almost nothing in 1960 to over 2% in 1980. Most of the non-white population consists of American Indians, Japanese, Chinese, Filipinos, and Vietnamese.

Available information from the 1970 Census also shows that Spanish-speaking persons and those with Spanish surnames together comprise only 2.4% of the population of the Town area.

Table VI-3

RACIAL CHARACTERISTICS

Year	<u>Market Area</u>			<u>Town Area</u>		
	<u>White</u>	<u>Black</u>	<u>Other</u>	<u>White</u>	<u>Black</u>	<u>Other</u>
1960	99.7%	0	.3%	99.8%	0	.2%
1970	99.1%	.1%	.8%	99.3%	.1%	.6%
1980	97.7%	.1%	2.2%	97.7%	.1%	2.2%

Individuals with various handicaps, disabilities or disorders often have specialized needs for certain types or designs of housing. According to statis-

tical averages from other areas, it is very likely that Paradise has a relatively high proportion of residents with such impairments because of the high proportion of the elderly in the population. Unfortunately, accurate data on the prevalence of various handicaps is available for Butte County and the entire United States, but not for small areas such as Paradise. The Citizen's Attitude Survey did a sample of the proportion of citizens in the Town who were physically disabled. Based on the households polled, it is estimated that in 1980, 7% of the Town population could be classified as physically disabled.

The California Department of Rehabilitation estimated that 5.5% of Butte County residents aged 16 through 64 are afflicted with severe physical, mental or sensory disorders and thus classified as disabled. However, this estimate includes digestive disorders, speech impediments, hearing problems, and other disorders which normally do not require special housing facilities. Other available information on the prevalence of the handicapped in Paradise includes an estimate by the Disabled American Veterans that there are at least 3,000 (about 10%) such people in the Paradise market area.

6.13 Household Size and Composition

The occupants of each housing unit, whether they are a family related by blood, marriage or adoption, or simply a group of unrelated individuals, are considered a separate household. The adequacy of the present housing stock and the required number and size of future units are both determined in a large degree by the size and composition of households. The basic data for Paradise households is summarized in Table VI-4.

Table VI-4

HOUSEHOLD CHARACTERISTICS

<u>Census Year</u>	<u>Market Area</u>		<u>Town Area</u>	
	<u>Average Size</u>	<u>Population In Group Quarters</u>	<u>Average Size</u>	<u>Population In Group Quarters</u>
1960	2.54	1.39%	2.50	1.46%
1970	2.49	2.19%	2.44	1.96%
1975	2.34	2.16%	2.34	2.29%
1980	2.31	1.99%	2.31	2.27%

Paradise's average household size of 2.31 in 1980 is significantly lower than the Butte County average of 2.46. This difference is consistent with the high median age on the Ridge and reflects the childless households characteristic of retired couples or individuals.

The limited data on marital status and family make-up from the 1970 Census tends to support the predominance of small elderly households in urban Paradise. Almost 84% of 1970 residents 14 years or older in age were either married then or had been married previously. Only 30% of the families had children under 18 years of age at that time. Almost 71% of Paradise households were composed of just one or two people; only 10% of the households had five or more members.

According to available data from the State Finance Department, household sizes are expected to continue to gradually decline in the next 20 years in most areas of California. This demographic trend reflects the increasing proportion of senior citizens in our society and may be accompanied by an increase in the number of persons residing in "rest" homes, nursing facilities, and other group quarters. Information on these non-household living quarters is presented in the Housing Stock Analysis section.

6.14 Income Levels

The housing needs described above become effective market demands if residents have adequate levels of income or other financial support. In 1969, the median family income for the Paradise market area was \$6,807, and 11.2% of the families reported incomes below Office of Economic Opportunity poverty levels, a very similar proportion to that reported for Butte County as a whole. For the Town area, the median family income was \$6,729; 11.0% of the families had 1969 incomes below the poverty thresholds, and 30% reported incomes of \$10,000 or more. The most common \$1,000 income bracket by far was the \$3,000-\$3,999 category. It is also interesting to note that 41.8% of all unrelated individuals had 1969 incomes below the poverty level of \$1,840; this group would include many single retirees living in rest homes or other group quarters.

The source of income also affects the securing of decent housing because some types of income are relatively "fixed" and do not increase as fast as inflation of costs and prices. In 1969, 47.8% of Paradise families received Social Security payments, and 8.3% reported some type of welfare payments or other form of public assistance.

The May, 1981 draft of the County's new Housing Element contains the estimate that 43.3% of all 1975 households in Paradise had total income of less than 80% of the Countywide median income.

According to the 1975 census, the median for 1974 household incomes in Paradise was approximately \$7,750, \$590 less than the Countywide median. The actual income levels are given in Table VI-5.

Table VI-5

PARADISE INCOME LEVELS - 1975

<u>Income Categories</u>	<u>Percentage of Responding Households*</u>
\$ 0- 999	2.3%
\$ 1,000- 1,999	2.7%
\$ 2,000- 2,999	7.4%
\$ 3,000- 3,999	8.7%
\$ 4,000- 4,999	9.8%
\$ 5,000- 6,999	14.8%
\$ 7,000- 9,999	17.3%
\$10,000-14,999	20.1%
\$15,000 or more	17.0%

*45% of Paradise households did not respond to this question, leaving some doubt as to the reliability of the data.

6.15 Regional Needs

The steady population increases in Paradise in recent years reflect a nationwide pattern of rapid growth in small cities and retirement communities, and are matched by similar increases in many parts of Northern California and particularly in the Sierra foothill region. Butte County's population increased 41% between the 1970 and 1980 censuses, and according to the State Finance Department, is expected to grow another 35% by 1990. These figures are of some relevance in the evaluation of Paradise's housing needs because of commuting patterns and State planning requirements. Since Chico and Oroville are major employment centers with workers who drive a half-hour or less from their residences in Paradise, the future growth of industry, commerce, and government in these neighboring cities will probably continue to create some additional demand for housing in Paradise.

One of the Legislature's intentions in adopting the latest requirements for local housing elements is to ensure that cities and counties cooperate

in addressing regional housing needs. Analysis of a locality's housing needs must include all who live within the area significantly affected by the jurisdiction's general plan. Each locality's share is to be determined by the regional council of governments after review of marketwide demands, public facilities, commuting patterns, and housing types and tenure. Housing element requirements include provisions for local revision of assigned housing needs based on available data and accepted planning methods.

A draft "fair share allocation plan" for assigning housing responsibilities to each city in Butte County has recently been prepared by County Planning Department staff and the consulting firm of Connerly and Associates and is contained in the May, 1981 draft of the County's Housing Element. For analytical purposes, the County is divided into four housing market areas around the urban centers of Chico, Paradise, Oroville and Gridley-Biggs. Each are socially and economically independent of the other to the extent that at least 95% of the residents of each area also work within the market area and because extensive urban development has not taken place in the unincorporated portions of the market area, the County has not proposed any allocation of housing needs in the Paradise housing market. This decision thus eliminates the legal requirement for governmental coordination between the Town of Paradise and Butte County in the provision of housing.

6.2 HOUSING STOCK ANALYSIS

6.21 Physical Characteristics

Because data from the federal census is incomplete at the time of this writing, quantitative information on Paradise's housing inventory must be obtained from previous census and other censuses. According to the final counts from the 1980 census, there were 10,123 housing units within Town boundaries on April 1, 1980. According to estimates by the State Finance Department, these units were distributed by the major types of residential structures as in Table VI-6. The dramatic rise in popularity of mobile homes and the gradual increase in proportion of multi-unit structures are shown clearly.

Table VI-6

COMPARISON OF UNIT TYPE DISTRIBUTION
FOR 1970, 1975 AND 1980 CENSUSES

<u>Unit Type</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
Single family	83%	72%	69%
2-to-4 unit structures	4%	4%	5%
5+ - unit structures		3%	3%
Mobile homes	13%	21%	23%

Census figures indicate that the median number of rooms in Paradise's housing units rose from 4.4 in 1970 to 4.8 in 1975. The percentage of one and two-room units dropped from 5.7% to 3.2% in that period while the units with 5 or more rooms went from 44.9% of the total units in 1970 to 54.5% in 1975. It is possible that the average housing unit size has continued to increase, but 1980 census figures are not yet available to further document that trend. Given the recent trends in the cost of mortgage and construction capital and the increasing popularity in smaller modular housing, it is also quite possible that the trend has reversed.

6.22 Age and Condition

Many housing units which would otherwise be available and suitable for meeting housing needs cannot be considered adequate because they are not safe, sanitary or weathertight or because they lack heating, plumbing, or cooking facilities. Unfortunately, the number of such sub-standard units is very difficult to ascertain because of the need to make complete inspections and judgements by qualified personnel.

The last federal census with enumerators' evaluations of housing conditions was in 1960; at that time, 14.6% of Paradise's housing units were judged to be "deteriorated," "delapidated," or lacking some plumbing facilities. Although the 1975 census collected data on housing conditions, subsequent surveys have shown that inexperienced enumerators seriously undercounted the extent of blighted housing conditions. In Paradise's case, only 3% were then classified as unsound, a very low proportion which should be considered a minimum estimate.

Since physical materials usually deteriorate with age, and older homes were often built or equipped to inadequate or obsolete standards, the age of a dwelling is often an indicator of substandard conditions. Combining 1970 data

on unit ages with the number of units added to the Paradise inventory between 1970 and 1980 leads to a breakdown of dwelling age in Table VI-7.

Table VI-7

AGE OF HOUSING STOCK

<u>Age Group</u>	<u>Proportion of Units</u>
0-10 years	38.2%
11-20 years	23.5%
21-30 years	20.7%
31-40 years	11.1%
41+ years	6.5%

The above figures assume that no units built before 1970 have since been demolished. The high proportion of units in the top two categories is a direct reflection of the rapid population growth that Paradise has experienced in the past two decades.

6.23 Occupancy and Tenure

Available information on average household size was presented earlier. Of comparable significance in the analysis of the Paradise housing market is the proportion of vacant housing units. Vacancy rates at the time of the last three censuses are given in Table VI-8.

Table VI-8

VACANCY RATES

<u>Year</u>	<u>Vacancy Rate</u>
1970	6.48%
1975	5.68%
1980	3.49%

The above rates include not only units for sale and for rent, but also vacant units which are not available for occupancy. This category includes seasonally used units, second homes, uninhabitable units, just completed structures, and units which have been rented or sold but not occupied yet.

The significant decrease in the vacancy rate between 1975 and 1980 is evidence of supply not keeping up with effective demand. The 3.49% figure for 1980 is generally considered to be a relatively low rate indicating a "tight" market in Paradise, much tighter than the other portions of Butte County.

Mobility and the rate of occupancy turnover can be inferred from the period of time each household has occupied its unit before the census date. The figures in Table VI-9 show the length of residency of a household before the 1970 and 1975 censuses. They indicate a moderate turnover rate and also show the high rates of influx or mobility which occurred in the early 70's and early 60's.

The housing market is split into two sub-markets by the ownership of units and whether they are to be occupied by a purchasing owner or a renting tenant. In 1970, almost 77% of Paradise's housing units were owner-occupied, compared to 63.5% for all of Butte County. No later data is available for Paradise, but according to estimates by the County's housing consultant, the proportion of owner-occupied units in the County has gradually increased to 69% in 1980. This trend may be accounted for by the increase in purchase and occupancy of more affordable mobile homes. Because of the popularity of mobile homes in the Paradise market, the proportion of owner-occupied units may have increased.

Table VI-9

LENGTH OF HOUSING OCCUPANCY

<u>Length of Residency</u>	<u>April 1, 1970</u>	<u>October 1, 1975</u>
0 - 12 months	26.3%	18.9%
1 - 3 years	18.7%	30.2%
4 - 6 years	14.6%	18.7%
7 - 10 years	21.4%	11.2%
11 - 20 years	15.0%	14.4%
21 + years	4.0%	6.6%
	<u>100.0%</u>	<u>100.0%</u>

6.24 Housing Costs

To most people the most important aspect of the housing stock is the total price required for the purchase or rent of their dwelling unit. Housing costs in Paradise have risen rapidly in recent years. This increase is well

documented by available census data. According to the 1970 census, the median asking price for the 58 one-family homes on the market was \$13,100 and none were valued at more than \$35,000. At the time of the 1980 census, the median asking price for the 78 single-family dwellings advertised for sale in the Paradise Post was in the \$70-75,000 range. If these figures are accurate, the total increase would be over 400% and the annual cost inflation would have been about 20% per year. Further evidence of this trend is presented below in Table VI-10 with the number and average price of single-family homes by number of bedrooms offered in the first April issue of the Post for 1975 through 1981.

The steady rise in costs is shown most clearly in the figures for the two and three-bedroom units; the increases in the 1975-77 and 1979-81 periods seem to have been the greatest, particularly the 125% gain in the average price of two-bedroom units between April 1975 and April 1977. The prices shown for the one-bedroom, four-bedroom and mobile home units are generally indicative of trends but are not statistically reliable because of the small numbers of such units. What is significant about the mobile home figures is the increasing number of available units, a trend discussed further below.

Table VI-10

AVERAGE PRICES FOR SINGLE FAMILY HOMES - 1975-81

<u>Year</u>	<u>1-Bedroom</u>	<u>2-Bedroom</u>	<u>3-Bedroom</u>	<u>4+-Bedroom</u>	<u>Mobiles</u>
1975	* 3-\$23,250	* 20-\$21,600	* 19-\$ 37,750	* 5-\$ 49,700	* 4-\$18,020
1976	1-\$20,000	23-\$34,200	16-\$ 44,900	2-\$ 43,000	6-\$23,150
1977	0	20-\$48,500	20-\$ 56,200	5- 66,300	8-\$27,900
1978	7-\$28,150	62-\$53,500	55-\$ 63,050	8-\$ 77,050	9-\$39,900
1979	2-\$32,100	38-\$56,050	35-\$ 69,450	4-\$ 74,350	15-\$35,600
1980	0	47-\$73,450	27-\$ 81,100	4-\$ 92,700	29-\$42,350
1981	1-\$39,500	52-\$76,200	30-\$102,750	6-\$120,550	35-\$34,000

*Number of units in the sample.

Source: Paradise Post classified section.

Similar price increases have also been experienced in the smaller rental housing market in Paradise. For the 79 vacant units for rent in April 1970, the median asking price was \$63 and only 5 were \$150 or more. In comparison, the data for April 1980 suggests a median price somewhere between \$250 and \$200 for all units available for rent at that time. The

numbers and prices of all rental units advertised in the first April issue of the Post are summarized in Table VI-11, but average prices were computed from a small sample.

Table VI-11

AVERAGE MONTHLY RENT FOR AVAILABLE RENTAL UNITS

<u>Year</u>	<u>1-Bedroom</u>	<u>2-Bedrooms</u>	<u>3+-Bedrooms</u>
1975	4-\$ 85	4-\$150	--
1976	6-\$120	5-\$230	--
1977	4-\$125	10-\$260	4-\$305
1978	4-\$145	8-\$235	3-\$350
1979	5-\$200	8-\$275	1-\$385
1980	8-\$165	10-\$330	5-\$370
1981	5-\$200	14-\$300	3-\$400

6.25 Group Quarters

Approximately 2% of Paradise's population resides in group housing quarters which are not included in any of the above data on housing unit characteristics. Because Paradise has a high proportion of elderly, and consequently a high proportion of residents with disabilities or impairments, most group quarters are intended for occupancy by senior citizens.

According to the California Department of Social Services, the agency which actually licenses and regulates all residential facilities where permanent care is provided for a charge, on March 26, 1981, Paradise had 62 licensed care homes with a maximum capacity of 538. All of Paradise's group quarters fall into this category. This total can be broken down by the number and age of residents of each care home, as given in Table VI-12.

Table VI-12

NUMBER AND CAPACITY OF LICENSE CARE HOMES

<u>Size Category</u>	<u>Total Homes and Capacity</u>	<u>Homes and # Adults</u>	<u>Homes and # Children</u>
Small Family (1-6 people)	34-151	28-131	6 - 20
Large Family (7-15 adults or 7-12 children)	5- 58	5- 58	-
Group (Larger than above)	23-329	15-222	8 -107
Totals	62-538	48-411	14 -127

Besides the obvious preponderance of adult-oriented facilities (77% of the homes and 76% of the capacity), it is also apparent that, while half of the homes are small "family" operations, over three-fifths of the licensed capacity is in the larger facilities. According to the staff of the Northern California Health Systems Agency in Chico, there is a serious shortage of convalescent facilities and care homes for all levels of nursing care required.

According to staff of the Far Northern Regional Center for the Developmentally Disabled in Chico, 29 of the homes with a capacity of 277 are for occupancy by the "developmentally disabled," a legislative category which includes all children or adults with mental retardation, epilepsy, autism or neurological disabilities. Staff believes that Paradise has a fairly large number of these facilities because it is a nice residential community which attracts older people who are experienced in such care. Managers of care homes for the developmentally disabled are paid a monthly stipend for each person under care. The amount depends on the level of the disability and care, and varies from \$495 per month for minimal care to \$631 for moderate care, and \$722 for intensive care. The Center seeks out additional care facilities through advertising, and prefers smaller homes with 6 or fewer residents.

6.3 MARKET EVALUATION

6.31 Demand Summary

The population of Paradise has grown very rapidly in the past 20 years as a result of in-migration of retirees and others from the large metropolitan areas to the south. Unless constrained by utility deficiencies, interest rates or local policies, migration and growth are expected to continue throughout the planning period at a faster rate than the State but slower than in the 1960's and 70's.

Although Paradise serves as a "bedroom suburb" for some workers in Chico and Oroville, the proportion of such commuters is low enough that Paradise is essentially a separate market area, not significantly affected by housing needs in other parts of the region. Because of this independence and because the Town is the only incorporated city in a market area with a low percentage of urban development outside Town boundaries, no allocation or coordination of regional housing needs is required for this element.

6.32 Overcrowding

A common measure used to evaluate the level of housing demand is the extent of "overcrowding." This condition is defined by several federal housing programs. The policy assumption is that such a situation is unacceptable because that level of crowding is harmful to the occupants.

The 1970 Census is the only source to actually tabulate the ratio of people per room for every occupied housing unit. Paradise's 1970 rate of 4.4% of occupied units with more than one person per room was significantly lower than Butte County's 6.9% and lower than most other communities in the State.

Given the previously reported decrease in household size and increase in dwelling unit size, it is likely that the proportion of overcrowded households has declined since 1970. Due to projected continuation of these trends, it could be expected that the degree of overcrowding would decrease even further in the future. However, both trends could possibly be reversed by increasing housing costs during the planning period.

6.33 Availability

The substantial decrease in the overall vacancy rate between 1975 and 1980 is evidence of a slowdown in housing production and thus a "tightening"

of the market. A more appropriate indicator of availability is the ratio of units which are actually for sale or for rent compared to the number of ownership units or rental units respectively. This data is directly available from the 1970 census but for 1980, the number of "available" units is simply those advertised for sale or for rent. Level of availability is given in Table VI-13.

Table VI-13

AVAILABLE HOUSING UNITS

	<u>Units For Sale</u>	<u>% of Ownership Units</u>	<u>Units For Rent</u>	<u>% of Rental Units</u>	<u>Available Units</u>	<u>% of All Units</u>
1970	61	1.3%	79	5.7%	140	2.3%
1980	107	1.4%	23	1.0%	130	1.3%

Source: Paradise Post classified section.

The above figures indicate that the 1.0% decrease in the availability rate is mostly due to the large reduction in the proportion of available rental units. The slight increase in the availability rate for ownership units may indicate the dampening effect on home sales of high interest rates in recent years.

6.34 Affordability

A major indicator of the effectiveness of a housing market in fulfilling the needs of local households is derived from the comparison of gross monthly income to monthly housing costs. The standard used by federal agencies, as well as most private financing institutions, is that no more than 25% of household income should be allotted for housing expenditures. Households paying more than 25% of their income for housing are, by this standard, "overpaying" for housing, and are often eligible for various types of housing assistance programs.

High interest rates and the inflated housing prices which accompany them are changing this common standard of affordability. People adjust to rising costs by increasing their proportionate expenditures for housing costs. Assuming that this upward adjustment will be a continuing trend, the criteria

for affordability will have to be increased also, perhaps to 40% within the planning period.

Reasonably up-to-date comparisons of income and housing costs will not be available until 1980 census figures are released. However, by applying the 25% affordability standard to the less complete information available from the 1975 census, we can make a rough evaluation of the affordability of the housing stock in 1975 (The affordability standard has been based on an adjusted median income figure for Paradise households of \$8,525).

The data in Table VI-14 show there was an adequate proportion of lower-cost housing units affordable to households in the lowest income categories, 0-50% and 50-80% of the median. Both types of data were reported by respondents with no other verification and that there was a high rate of non-response to both questions. These two factors tend to lessen the reliability and usefulness of the data.

Table VI-14

COMPARISON OF 1975 MONTHLY INCOMES AND HOUSING COSTS

	Income Categories			
	\$ 0- \$4,262	\$4,263- \$6,821	\$ 6,821- \$10,230	\$10,231 and more
% of Median Income	0-50%	50-80%	80-120%	120+%
% of Households	20.0%	19.7%	19.2% (60.3%)	41.1%
	Housing Cost Categories (25% of Income)			
	\$ 0-\$89	\$90-\$142	\$142-213	\$214
% of Housing Units	23.7%	20.4%		55.9%

6.4 RESOURCES AND CONSTRAINTS

6.41 Cost Factors

The housing delivery system usually requires the involvement and the coordination of many different activities in both the private and public sectors. Most new housing in Paradise, like most of this country, is proposed, financed, constructed and purchased with private resources and by individuals

or firms attempting to earn a profit or income in the process. Actors in the process include investors and developers, banks, savings and loan institutions, engineers, architects and designers, building contractors, trade unions and the producers and suppliers of materials, title insurance and transfer companies, private utility companies, realtors, and the purchasing or renting households. Since the economic survival of all these groups requires responses of varying flexibility to changes in their costs, all have been caught in the rapid inflation of prices and wages.

All levels of government are directly and indirectly involved in the housing market. The federal government has the most pervasive influence; collecting taxes in incomes and business profits, setting minimum wage and safety standards, controlling the development of much of the nation's timber, mineral, gas and power resources, diverting capital and resources to other activities, limiting the amounts of imported materials and labor, and attempting to prevent various types of discrimination and fraud. Since the private housing market is frequently deterred from functioning effectively by constraints in both the private and public sectors, the federal government has also undertaken many programs of insuring, financing, subsidizing, and building housing. Programs being used in this area are discussed later under the title of "Housing Assistance Programs."

State governments are frequently involved in the same type of housing-related activities as the federal government, and many have also initiated direct programs of market assistance. State housing activities include requiring local governments to use their delegated powers and direct involvements to provide for local housing needs. However, many of the factors affecting financing, labor, and materials cannot be significantly affected by the limited powers and resources of cities and counties. For that reason, this housing element and the policies and activities recommended herein focus on factors affecting the availability, affordability, and habitability of housing which can be controlled, or at least influenced, by actions of the Town of Paradise and other local entities.

6.42 Building Sites and Densities

The amount and price of land available for development of new housing is the cost factor most affected by local government policies. American

household demands for space, privacy, and independence require large land areas for residential development. The location, extent, and density of that development are controlled by local communities for the general welfare through the exercise of planning, zoning, and other powers delegated by the State. These controls to some degree limit the number and size of new housing units, which in turn may influence the value of the land and the land costs per unit.

The cost of acquiring a building site is of primary importance to the housing market not only because the availability of land is an essential ingredient which is largely controlled by local government, but because land costs are commonly considered an indicator of the construction costs and total value of new housing which should be built on the site. Although raw land costs are frequently less than 15% of total value, prepared lots or sites are usually worth 15-30% of the total sales price of new housing. Since land prices vary widely and have such a strong effect on total costs, site acquisition for speculative development is always preceded by an evaluation of whether the total revenue from marketing the allowed number, type and size of units exceeds total costs by a profitable margin.

Local plans for residential densities take into account three general considerations, all of which are controlled by local government in large degree. First, the slope, soil conditions, and other physical characteristics are limiting factors. The second groups of density factors are those regulatory policies which express our cultural and aesthetic concerns about the size, safety, comfort, appearance, and arrangement of new housing and the noise, smell, appearance, vegetation, open space, and traffic in the surroundings. The third type of local government control over densities which must be considered in long-range plans is the provision for public subsidized improvements such as roads, water and sewer lines, drainage facilities channels, parks, schools and other public utilities and services.

The physical characteristics of land which most limit residential densities in Paradise are the limited soil permeability, steep slopes, and the abundance of mature pines. The volcanic soils found in this area vary in permeability, but are generally considered of moderate suitability for sewage disposal by septic tanks and leach fields. This factor and the County Health Department standards associated with it, together have determined the maximum residential densities in the past and, until off-

site disposal systems are created, will continue to set the limits. Under the best of conditions in Paradise, current standards will allow single family lots of no less than 12,000 square feet (3.6 per acre) and multiple-unit development of 10 or fewer units per acre.

The steeper slopes characteristic of the large canyons east and west of the Town and the small canyons to the south have not been a significant supply limitation in the past, but as better sites become scarce during the planning period, pressures will increase to utilize sloping sites to the maximum. Health Department requirements for leach field areas increase by the degree of slope to 30% (a drop of 3' to 10' forward); underground disposal is not allowed on steeper slopes. Steeper grades are also subject to erosion, rapid fire spread, high development costs, and other problems.

Steep slopes and tall pines are both physical characteristics which will limit residential densities because of aesthetic concerns. Many canyon rims and nearby areas with dramatic scenic views are already occupied by large, single-family residences at very low densities. The preservation of the residential quality of these outer areas and of all areas which are heavily forested with Ponderosa pine is a lifestyle choice and environmental goal which discourages higher densities from many areas of Paradise.

Paradise's dominant residential pattern of detached single-family homes on large lots also reflects the conscious preferences and the cultural environment familiar to many of the older households who move to Paradise. As long as there continue to be buyers for large lots and their spaciousness, privacy, quiet, natural vegetation and security, economic pressures, and political difficulties will discourage zoning of vacant land in such areas for high densities.

The total growth and urban densities of the Paradise area have only been permitted by the domestic water systems of the Paradise Irrigation District (PID), Del Oro Water Company, Magalia Water District, and Lime Saddle Community Services District. The capacity of each of these systems is projected to be adequate in the near future, but there is a strong possibility that the existing water supply facilities will not be adequate for expected long-term growth in the area now within PID and the Town. This possibility of course depends on actual growth and usage rates and could be lessened by enlarging storage capacities and acquiring additional sources. Because of the State requirements to eliminate sediment in PID's

water supply, new water connections and new housing in the Town may be halted if voters do not approve a June, 1982 ballot measure to finance construction of a water filtration plant.

The adequacy of public road access varies greatly in the areas served by domestic water systems and is frequently a limiting factor on residential densities in the "perimeter" areas of the Town. However, this problem and that of providing effective drainage facilities can sometimes be solved through organized cooperation between adjacent landowners and developers and coordination by the Town. It is obvious that such techniques will also be required to develop off-site sewage disposal systems which would allow higher densities on sites which are otherwise suitable.

In addition to all the above factors, the land costs and zoning densities of particular locations are often affected by the surrounding uses and the distances to services and facilities. Adjacent commercial uses may increase the value of some residential development because of the proximity of business services, but the noise, lights, and traffic of commercial development can frequently have a negative effect strong enough to discourage new residences and encourage conversion or demolition of existing residences to allow additional commercial uses. Other intense uses in Paradise which have some negative effects but which are nonetheless more encouraging to nearby residential development would be the elementary schools, parks, public offices, and medical facilities.

Application of all the above density factors to Paradise leads to the conclusion that the lands most suited for higher-density development are those lying in or near the "core" area along lower Skyway, Elliott Road, lower Clark Road, and Buschmann Road. The most significant problems associated with residential development in this area include the lack of off-site sewage disposal, the need for additional drainage facilities, and the competition and negative impacts of commercial development. Besides the positive factors of good road access, proximity to services, moderate slopes and limited single-family development, this area also has the potential of additional sites being created by removal of older dilapidated dwellings and assemblage of small parcels.

Allowing higher densities in suitable areas may in some cases lower the land costs per unit, but may also provide increased profit margins without lowering sales prices. It is important to understand that increasing the

housing supply will only lower prices if the demand is fairly limited. However, the migration trends and growth pressures in rural retirement centers such as Paradise are expected to be substantial throughout the planning period and cannot be satisfied by the efforts or increased densities in any one community. Consequently, market demands will probably keep Paradise's housing prices high no matter how many new units are made available.

Policies for Site Availability

Support PID construction of a filtration plant, expansion of supply facilities, conservation programs and other measures which would provide sufficient water for residential development served by domestic systems.

Limit commercial zoning to expected needs in order to avoid unnecessary demolition and conversion of existing housing units and to make suitable sites available for new housing.

Allow residential and mixed development in commercial zones, particularly dwellings in upper stories.

Encourage creation of new building sites through demolition of dilapidated units and assemblage of small parcels.

Policies on Housing Densities

Allow single-family residences at densities of no more than 4 units per gross acre in areas which are so developed at present, have insignificant slopes, and good road access.

Allow other types of new housing up to 10 units per gross acre in areas with good road access, fairly level sites and nearby services and facilities, particularly within the central area bounded approximately by the Skyway, Elliott Road, Clark Road and Buschmann Road, and along middle Skyway and Clark Road.

Encourage development of off-site sewage disposal facilities in areas which have poor leaching capabilities but are otherwise suitable for higher-density development.

Assist development of specific plans for residential densities, roads, drainage, utilities and sewage disposal in the largely undeveloped ridge tops along the southern and western edges of the Town.

6.43 Development and Construction

The various costs of site development and building construction are together the largest part of new housing prices. Depending on land costs,

financing and profit levels, 50 to 75% of the total sales price of new units is usually derived from the costs of clearing and grading the site, installing utilities, drainage and street improvements, designing, building, and equipping the structure, and landscaping and fencing the site. The largest part of development costs, in turn, are the labor and materials required for actual building construction. These two components of construction costs are also the least controlled by towns such as Paradise, being determined by regional wage and price levels, union contracts, distance from labor pools and materials sources, and by federal and state policies on taxes, minimum wages, safety standards, labor relations, shipping rates, foreign trade, and resource exploitation.

Local jurisdictions like Paradise are mandated by the State to have planning, zoning, subdivision review, environmental review, and building regulations and are authorized to require installation of utilities, drainage and street improvements, and dedication of land or money for schools, parks, streets, and other off-site facilities affected by the development. Paradise's requirements for review and approval affect development costs in three different ways.

(a) First, in addition to the previously discussed effects on land costs and densities, planning and zoning have restricted the arrangement and type of construction through setback requirements and lot design criteria and through prohibition on mobile homes, mobile home parks and/or multi-unit structures in various areas. Paradise's setback requirements and lot design criteria are both very simple, traditional standards derived from Butte County and could be modified to allow more flexibility in site development, such as narrower lots with zero side yards or alternating side yards. Prohibiting attached units or multi-unit structures maintains the traditional detached home pattern and the associated high development costs while preventing clustered development with larger open spaces and lower utility and improvement costs per unit. Given the nationwide trend toward smaller and cheaper clustered units in non-custom developments and assuming that overall densities could still be limited as recommended above, the Town should reconsider its traditional standards and patterns with an eye toward future housing costs and most efficient use of limited land resources. New approaches to housing and lot design should be considered in revision of the Town subdivision codes (See Regulatory Devices section).

Zoning to prohibit mobile homes has been initiated by local residents in many areas of Paradise, and this type of lower cost housing has thus been prohibited in more than half of the residentially zoned areas in the Town. Such zoning has been legally allowed or upheld in the past because mobile homes were factory-built units constructed to a lower set of standards and taxed as motor vehicles rather than as real property like conventional "site-built" houses. However, recent California legislation has changed all aspects of this situation. Construction standards for mobile homes have been raised to a level very close to conventional building codes. Since 1980, new mobile homes placed on foundations are taxed as real property and not registered and taxed as motor vehicles.

The most recent mobile home legislation is Senate Bill 1960, adopted in September, 1980. This bill took effect on July 1, 1981, and permits mobile homes meeting certain standards to be placed on foundations on any lot zoned for single-family dwellings. However, the effect of this provision is limited by the bill then authorizing a city to designate lots which are compatible for mobile home use, implying that certain lots or areas which are not compatible for such use may also be designated. Interpretation and implementation of these provisions have varied widely. Butte County and the Town of Paradise have complied by allowing single mobile homes in all residential zones, Chico created a new overlay zoning for mobiles, and Oroville holds that its existing zoning for mobiles meets the law. There is a good possibility that these provisions may be further clarified by the courts or the legislature.

(b) The second area of development control exercised by the Town is the enforcement of detailed building and design standards on all new construction. Like most California cities, Paradise has adopted the Uniform Building Code developed by national building organizations; the 1979 version of the Code is now in effect in Paradise. Although the Code is periodically updated to reflect changes in materials, techniques and standards, it is oriented to the use of wood and other specific materials and is not always reflective of the "state of the art" in building methods and materials which might cut costs while meeting recognized standards of strength, durability, and insulation.

The Town should undertake a review of relevant innovations and cost saving materials and techniques that will provide the same quality dwelling

at a lower unit cost to the consumer. These standards will naturally supplement UBC codes and should take precedence as long as the health, safety and welfare of owners, future owners, neighbors and the community are respected.

Although the Town sets minimum standards for new construction, the builder still has control over many choices of size, quality and style, including the size of units, rooms and windows, the quality of cabinets, appliances, fixtures, flooring and wall covering, the arrangement of rooms and the provision of such "options" as garages, fireplaces, patios, fences, lawns, landscaping, and recreation facilities. Inflation of housing prices in recent years can be partially blamed on the expressed preferences of home buyers for larger and better dwellings, but leading analysts believe that most households of the future will not be able to afford the spacious single-family homes and amenities we have grown accustomed to.

The two special housing types abundant in Paradise, mobile home parks and group care homes, are valuable supply resources which are licensed by the State and regulated by the Town through zoning. Mobile home parks allow rental of sites for detached ground-level units with low maintenance in moderate densities and offer a unique blend of privacy and social opportunities. Rest homes, nursing homes, and similar types of group quarters provide suitable housing for many elderly and others needing daily assistance. Approval of a use permit by the Planning Commission is required for construction or expansion of mobile home parks and for care homes with seven or more residents in some zones. Mobile home parks and care homes are both efficient housing forms which should be encouraged in appropriate locations.

Some type of discretionary review and approval of new development by the Town is required for most types of new housing. In addition to all mobile home parks and large care homes in some zones, multiple-family structures require use permits in the "A-2 Ltd." zone covering much of Paradise. All subdivisions of land for purposes of sale, lease or financing, whether for single-family lots, clustered townhouses, condominiums or apartment sites, must by State law be approved by the Town as consistent with adopted plans and ordinances. These two types of approvals and re-zoning are the major devices for implementing land use plans and policies and require much from developers in terms of application fees, review time, uncertainty, and holding costs. The Town's present application fees

are higher than the average of other Sacramento Valley cities of similar size, but many of those cities are considering increases to cover all costs. Review periods for simple projects are quite reasonable when compared to other cities, but opposition by existing residents has delayed many projects since incorporation.

(c) Like use permits, all discretionary approvals of new housing can be accompanied by conditions and/or mitigation measures requiring sizeable amounts of money, time, and land from developers. This is the third major aspect of development costs affected by Town policies. The Town's present requirements for on-site and off-site improvements are considerably less than most California cities of comparable size and development and are not generally considered to be a significant impediment to residential development. In order to preserve the "rural mountain" character, sidewalks and concrete curbs and gutters are not required on local streets in single-family areas. Compared to many areas, utility hookup fees are very reasonable.

With the recent inflation of gas costs and decrease in average car sizes, the Town's present standards for vehicle access and parking could possibly be modified to reduce housing development costs. The required width of travel lanes and size of parking spaces are based on average car dimensions which may continue to decrease in the future. Based on recent experiences in other areas, the Town's present requirements of two parking spaces per new unit are excessive for rentals or small units occupied primarily by the elderly.

Because of the large proportions of elderly and handicapped in the Paradise population, the design of all new multi-unit housing should reflect their needs. This should include designated spaces for handicapped parking, ramps, elevators for multi-story structures, wide doors, and controlled access. With its population size and characteristics, Paradise should be able to attract and support one or more large "lifetime care" retirement centers with a variety of services designed for the elderly and disabled (See Senior Services Element).

Because of the high costs of development and construction of new units, many apartment complexes throughout the country have in the past few years been converted into condominium projects wherein dwelling units are individually purchased but the building site, shared facilities, and surrounding

grounds are usually owned and managed by a property owner's association. This process creates small sales units of sometimes affordable prices, but also forces many low income tenants who cannot afford the purchase to move out. In areas with high vacancy rates in a large stock of rental units, condominium conversions may cause few problems, but such a trend could be disastrous in Paradise because of the limited available rentals and the fixed income levels of elderly residents. Condominium conversions are reviewed and approved by local governments such as tentative subdivision maps, but Paradise has no special restrictions on such conversions other than State requirements that tenants must receive advance notice of the change and must be given the first chance to buy the unit. Many cities have passed ordinances to restrict or prevent conversions where other rental opportunities are limited.

Policies on Development and Construction

Analyze setback requirements, lot design criteria, review procedures, parking requirements, and street improvements standards and modify where possible to cut development costs.

Review innovations and cost saving materials and techniques that will provide the same quality construction at a lower cost to the consumer.

Allow mobile homes in all residentially zoned areas of the Town unless clearly incompatible with existing development.

Allow mobile home parks with a use permit in all zones which allow multi-unit structures and in lower density zones where the design, densities, and appearance is compatible with the residential neighborhood.

Allow rest homes and care facilities for the elderly and disabled where compatible with surrounding development.

Encourage development on suitable sites of Life Time Care retirement centers and other housing designed specifically for the elderly.

Require the first floors of the multi-family developments to accommodate access and use by the elderly and handicapped.

Limit curbs, gutters, and sidewalks to major streets and areas with intense uses (See Circulation Section).

Limit development charges to the estimated costs of Town expenditures and needed improvements.

Limit condominium conversions to assure sufficient housing opportunities for renters.

6.44 Financing

The asking prices quoted earlier for purchases of housing units in Paradise do not include the various costs of borrowing money and actually completing the transaction. Monthly payments and the affordability of housing are determined as much or more by the interest rates on construction loans and home mortgages as by land costs, development costs, or any other factor that local governments have control over.

When interest rates are high, the burden of financing costs can be otherwise reduced in only a few days. The most direct method is reducing the principal by increasing the cash down payment which does not have to be financed. Most buyers who are selling their present home increase their disposable equity for this purpose by raising the selling price as high as the market will pay within an acceptable time period, thereby triggering further inflation of housing costs. In such conditions, first-time buyers without the equity to pay a large down payment frequently cannot afford average new housing costs. It is obvious that the rapid escalation of housing prices in attractive small communities like Paradise are caused largely by the influx of buyers with large equities to spend from the sale of homes at metropolitan area prices.

The 16% interest rate commonly used today and the conventional 30-year fixed payment mortgage are largely responsible for the present slump in sales of medium-priced units. Consequently, the "filtering-down" process of transferring housing to upwardly mobile young families has also slowed down. Since existing home owners are not selling and moving as much, the new home market must focus on first-time buyers with limited incomes who cannot afford the standard product of the past, a detached 1700 sq. ft. house with 3 bedrooms and 2 baths. Financing constraints will thus force the production of smaller, more basic housing units with fewer amenities.

The lending industry's major response to such trends is to develop new types of mortgages with more affordable initial payments. Alternatives now being used or talked about include "variable-rate mortgages" with rates allowed to change by market conditions within certain limits, "renegotiable-rate mortgages" where rates can be increased a certain amount

every three to five years, "graduated-payment mortgages" with increasing monthly payments, "shared appreciation mortgages" where the buyer gets lower rates by giving the lender a share of the profits if the house is ever sold, and "wrap-around mortgages" with the buyer simply assuming the existing mortgage, usually at lower rates, and borrowing at prevailing rates for the remainder.

Policies on Financing

Encourage State and federal legislation which would increase capital available for residential financing and permit varied types of lending agreements.

Prohibit discrimination in financing on the basis of age, religion or national origin in the sale or rental or housing.

6.45 Maintenance and Utilities

A major concern of homeowners, landlords, and tenants alike is the continuing cost of maintaining dwelling units in a functional, safe, and healthful condition. Cost components of this process include the charges for electricity, gas, water, and other utilities; the time and energy needed to clean and repair; the prices of paint, wood, and other building supplies; the replacement costs of equipment, fixtures, and appliances; the wages of paid assistance; and financing costs if a loan is required. All of these costs tend to increase over time, both because of general price inflation and because of physical materials and equipment wearing out as housing ages.

The number of substandard units in Paradise reflects both the owner's limited capabilities to pay these costs and the lack of any pressure and assistance to make improvements. Homeowners with fixed incomes may have the motivation to improve their own properties but have decreasing capabilities to do it. The owners and managers of apartments and rest homes may be able to increase their maintenance capabilities by raising rents, but increased expenditures, especially if they can be avoided or delayed, may seem an unnecessary reduction in net income.

Although rehabilitation can add considerable value to deteriorated housing, this increase can be a disincentive to such work if it means higher monthly costs. Tenants are frequently hesitant to report poor conditions or code violations because the costs of necessary improvements may help initiate increases in rent payments. Few tenants are aware of

the legal resources available to obtain adequate housing conditions. In the past, some homeowners have refrained from making improvements, or at least from getting required permits, because their property assessments and taxes would go up. However, since passage of Proposition 13, increases in assessments are limited and not as much as a deterrent in this regard.

Because of the distribution and setting of substandard units in Paradise, there has not been strong public concern about rehabilitating or demolishing such units. Unlike many communities where dilapidated housing is clustered in the older central areas, Paradise's pattern of filling in all portions of a large irrigation district has resulted in older substandard units being scattered throughout the Town. Areas do vary in the age and condition of dwellings, but there are very few clusters of such units. The low visibility of blighted housing conditions because of dispersal is further enhanced by the low densities, fairly large setbacks, and abundant screening vegetation.

Limited resources are available to assist residential maintenance in Paradise. The Town's building inspectors have the knowledge and position to provide technical advice. Many of the elderly living in Paradise have experience and time which could be put to good use in an organized volunteer program. The Chico Housing Improvement Program (CHIP) has been quite successful with a combination of volunteer labor, experienced supervision, donated materials, and local government assistance. The several types of available government assistance are discussed below under "Housing Assistance Programs."

Housing element guidelines require an analysis of opportunities for energy conservation with respect to residential development. This requirement obviously expresses State concerns about future needs and development of energy resources but is also included because of the benefits of reducing everyone's monthly utility bills as much as possible.

Although the actual sources and rates for electrical power and natural gas are controlled by the State Public Utilities Commission, local governments can influence the amount of energy resources used in their jurisdiction. The most direct measure is to simply reduce government energy usage as much as possible, thereby setting a good example for the private sector.

Local controls on development and construction can be especially effective in reducing energy usage. Strict enforcement of the latest State requirements and building code provisions on insulation, windows, and equip-

ment can help minimize waste in heating and cooling operations. Allowing higher residential densities in order to facilitate smaller, more efficient units with shared walls can aid in reducing energy costs per unit. Local policy makers may set higher standards for energy-efficient design if they wish. Such efforts in Davis and other California cities have addressed lot and window orientation, street lights, increased south setbacks, foundations, roof design, water heating, clotheslines, landscaping; features to make use of solar heating and natural cooling processes.

The costs of gasoline fuel for vehicle transportation can also be minimized by policies on residential development. Allowing higher densities and clustered development reduces distances between units and can reduce distances to shopping and other services if located nearby. Providing or requiring bike paths and lanes can encourage bicycle use and thereby reduce vehicle use. Travel to work places, as well as extra heating and cooling required, can be reduced by allowing small home businesses by residents.

Due to the limited water supply, it is also important for the Town to use its powers to minimize water usage. Possible measures are very similar to those for electricity and gas: reduce government consumption, support conservation programs, allow clustering, enforce building codes, and require drought-resistant landscaping and restricted waterflow devices.

Policies and Maintenance and Utilities

Inspect housing upon complaints about health and safety problems and require compliance with applicable codes.

Initiate a program of periodic inspections of apartments and rest homes.

Require demolition of vacant dilapidated dwellings which are not economically feasible to bring up to code requirements.

Encourage and support housing improvement programs by local organizations and volunteers.

Support legal obligations and powers of owners and tenants in maintaining adequate housing conditions.

Require design of new residential development to minimize use of energy and water and to maximize use of natural lightings, heating and cooling processes.

Allow home occupations (See Commercial Land Use Section).

Require developers to pay the costs of new facilities and increased services needed for the new development.

6.46 Residential Environments

The rapid growth of Paradise is largely due to the pleasant living environment created by pine forests, clean air, cool nights, and scenic views. These advantages have been enhanced, or at least partially protected, by the low density of residential development allowed by individual sewage disposal. These two factors together, the mountain setting and low densities, are extremely attractive to newcomers and their preservation is the major housing-related objective of many Paradise residents. The maintenance of a "suitable living environment," part of the State's housing goal, seems to be more important to many than the availability, affordability, condition, or any other facet of the housing market.

The lack of interest and support in building new housing, developing sewer systems, and using government housing programs in Paradise reflects this attitude. New development is often seen as a threat to the positive aesthetics of the natural setting. The potential blighting influence of new development is especially objectionable when that new development requires the removal of large trees, uses unnatural colors and materials, provides no landscaping, or has a repetitious, unimaginative design.

Maintaining Paradise's attractive appearance while allowing new development is possible with the proper consideration of regulatory controls. The critical factor of residential densities has been addressed previously in this element and is also considered in the Land Use Section of this Plan. The Town has an ordinance concerning the preservation of trees, and there has been some local discussion of requiring new development to have exteriors with a natural or mountain quality. Many cities, including the nearby ones of Chico, Oroville, Red Bluff, and Redding, have some sort of board reviewing exterior design and landscaping.

Policies on the Residential Environment

Encourage retention of adult trees or replacement with adequately sized trees on all new development sites (See Residential Land Use Policies).

Require complete landscaping of new development other than single-family homes.

Require natural colors, materials, and textures as much as possible in new development.

Limit structural height by residential density or intensity of use.

6.47 Housing Assistance Programs

Since the National Housing Act of 1934, the federal government and most states have developed a variety of programs to assist the housing market in providing decent housing to low and moderate income families. Such programs usually involve loans or grants to local agencies or sponsors, including cities, counties, housing authorities, redevelopment agencies, non-profit corporations, and private developers. Most federal housing programs have been administered by divisions of the Department of Housing and Urban Development (HUD) in recent years.

(a) One of the oldest and most direct federal programs has been loans and grants to local housing agencies to develop, own, and operate rental complexes for low-income residents. The Butte County Housing Authority, a semi-autonomous public corporation created by the County, has participated in this program for many years and now has 310 units in Chico, Gridley, and Biggs. Another 60-unit complex for the elderly, handicapped, and disabled is under construction in Oroville, and 80 more family units are planned for Chico and Oroville. Eligible households can presently have income of no more than \$8,300 for 1 person and up to \$14,800 for 8 or more people. Monthly rental payments are 25% of gross income and average about \$95 in Butte County. Approximately 300 families are on the joint waiting list for this program and the one described below.

The director of the Authority has stated that he would be willing to develop a public housing complex for the elderly, handicapped, and disabled in Paradise if the Town Council and the public were interested and supportive. Council support would have to be in the form of placing a referendum on the ballot; Article 34 of the State Constitution requires 2/3 approval of the voters for such a project. In order to provide a community room and other amenities, 50 units would be a minimum size project.

(b) The Housing Authority's other major HUD program now provides rent subsidies to 607 lower income families living in private housing. Income

limits are somewhat higher than those stated above (\$10,400 to \$18,600). Eligible tenants pay no more than 25% of their income for rent, and the Authority then subsidizes the landlord for the difference between the rent payment and a reasonable rent level. This "fair market rent" is determined for all of Butte County and is now set at \$235 for 1-bedroom units, \$300 for 2-bedroom units, and upwards for larger units. More than 50 scattered units in Paradise are now in the program, and funds are reportedly available for additional units if they meet certain standards of safety and sanitation.

(c) Federal legislation in 1974 created flexible "Community Development Block Grants" to finance local government activities which were previously eligible under Model Cities, Urban Renewal, Neighborhood Facilities, Rehabilitation Loans, Open Space, and several other similar programs. Spending priorities are determined at the local level, but the law states several HUD funding priorities: lower-income housing needs, suitable living environments and expanded economic opportunities. The distribution of funds to local governments is therefore based on a formula which considers population, poverty, overcrowding, age and condition of housing, and "growth lag." Over 4,000 communities have participated in the program, including Chico, Oroville, and Butte County. The Town's Council and staff are now exploring the possibilities of submitting an application for block grants to be used initially for a senior citizens activity center and later for other projects indicated by local interests and the proposals in this General Plan. Other eligible activities which might be appropriate for Paradise include acquisition of sites for recreation facilities, housing for elderly and pedestrian-oriented commercial development and construction of sidewalks, drainage facilities, sewage disposal systems, and a water treatment plant.

One of the most popular activities in local block grant programs is the provision of low-interest loans to property owners for rehabilitation of basically sound structures. Applicants must be unable to secure private financing, but capable of repaying the loan. Preference is given to low and moderate income applicants, and loans may not exceed certain amounts. Bringing substandard structures up to code requirements through this program helps create pride of ownership and sets good examples for surrounding properties. Where units are not feasible for rehabilitation and must be

demolished, relocation funds are available through the block grant program and the Housing Authority can also help find new housing for displaced occupants.

(d) The Community Action Agency of Butte County has many programs to aid low-income families, but the one most directly related to housing is a weatherization program funded by the U.S. Department of Energy through the State Office of Economic Opportunity. The purpose of the program is to reduce the energy and fuel needed for heating and cooling by providing attic insulation, water heater wrapping, weatherstripping, caulking, sealing, replacing glass and doors, and repairing holes. The services are available at no charge to any family meeting certain income guidelines, and priority is given to the elderly and disabled. The program is now averaging 150-180 participating homes per year, and about half of them are in the Paradise area. Other related Agency programs have included emergency repairs, assistance with utility payments, more extensive home repairs, neighborhood cleanup campaigns, and energy demonstration projects.

(e) There are a large number of other HUD assistance programs still technically active, but only a few have been used in Paradise because of funding limitations, inexperienced developers, and lack of sidewalks, curbs, gutters, and sewers. The three most used in Paradise are referred to in legislative terminology as "203(b)," "236," and "Section 8," and are managed by the Federal Housing Administration (FHA). The 203(b) program of home mortgage insurance has helped finance over 11 million homes over the past 47 years, and has benefitted an uncounted many in Paradise. There are no income limitations in this program, and houses must meet certain standards to be eligible. Of the many other FHA mortgage insurance and interest subsidy programs, only the 236 program has been used in Paradise, assisting development of a 12-unit apartment building. The Section 8 program, which provides rent subsidies to tenants in a privately owned 48-unit complex, is the same as used by the Housing Authority.

(f) The State of California has developed several housing assistance programs in recent years which are being used increasingly by both public and private participants throughout the State. The California Community Redevelopment Law allows every city and county to set up a "Redevelopment Agency" (RDA) to improve conditions in blighted areas characterized by unsafe structures, faulty planning, inadequate public facilities, social

problems, lack of economic incentives, and the need for public assistance. Permitted RDA activities include replanning, land acquisition and disposition site clearance, structural rehabilitation and reconstruction, public utilities and buildings, and financial assistance for private redevelopment activities.

Following its creation and the preparation of a detailed plan, the RDA receives all future increases in property tax revenues in the designated project area(s). These tax increment funds can finance RDA activities directly or can be the projected revenue base for issuance of tax-exempt tax allocation bonds to get working capital early in the program. At least 20% of tax increment funds must be used to improve and increase the supply of housing affordable to families of low and moderate incomes. With the Proposition 13 limits on annual inflation of property tax assessments on existing development, it is obvious that tax increment funding can only be feasible and effective if redevelopment activities actually result in substantial new construction or increases in property sales prices.

Several other State programs are available to RDA's and other local agencies or sponsors. The California Housing Finance Agency (CHFA) finances development and rehabilitation of housing for low and moderate income families by selling tax-exempt revenue bonds to provide direct construction loans, low-interest home purchase mortgages and low-interest loans for land acquisition, design, utilities, site preparation, and construction of affordable housing. It funds local programs for counseling low-income families in home management and provides rental assistance to the developmentally disabled through the Marks-Foran Residential Rehabilitation Act of 1973. California cities may sell tax-exempt bonds to finance low interest loans for housing code corrections and other property improvements.

Housing Assistance Programs

Assist development of a housing complex for the elderly, handicapped and disabled through the Butte County Housing Authority by helping the Authority select and acquire a site and by placing a referendum on the ballot.

Support continuance and expansion of the Housing Authority's rental assistance program.

Apply for Community Development Block Grant funds from HUD to help finance a senior citizen's center, acquisition of new housing sites, rehabilitation loans, construction of public facilities, and other eligible activities.

Support continuance of the Community Action Agency's weatherization program and other housing related programs.

Encourage local developers and non-profit sponsors to use HUD-FHA programs to assist construction of affordable housing, particularly for the elderly and those needing various levels of daily care.

Investigate the possibility of forming a Redevelopment Agency (RDA) and prepare a plan for eligible activities within a project area.

Support continuance and local use of housing assistance programs provided by the California Housing Finance Agency and the California Department of Housing and Community Development.

6.5 ACTION PROGRAM

6.51 5-Year Quantified Objectives

The preceding discussion on Paradise's housing resources and constraints indicates that the Town can accomplish much toward meeting housing needs and solving problems. However, it is also apparent that the community does not have the resources, experience and ability to fulfill all those needs. The major reason for this relative deficiency is the unlimited nature of the growth pressures and new housing "needs." No single community can hope to satisfy more than a small part of the needs of metropolitan area residents seeking a small town's tranquility, security, greenery, etc.

The major local limitations to solving Paradise's identified housing needs can be classified as environmental, economic, and experiential. Environmental constraints include the limited land area available for development on the Paradise Ridge, less-than-ideal soil conditions and local desires to preserve trees and maintain low densities. The most significant economic constraints to Town action are limited tax revenues, the high cost of road improvements, sewers and other public facilities, and inadequate funding of most state and federal assistance programs. Experiential limitations are the political and management problems associated with the newness of the Town government and the relative inexperience and reluctance in assisting the production of housing.

Under these circumstances, it would be unreasonable for the Town to attempt to meet all present and future housing needs in any period of time. State guidelines recognize this reality by asking local governments to establish the maximum number of housing units that can be constructed, rehabilitated, and conserved over a five year time frame.

The population forecasts presented earlier, along with reasonable assumptions of other factors, permit an estimate of the total number of new housing units needed in a five year period. With adoption of this element by the end of 1981 or in early 1982, then 1982 through 1986 would be a realistic period for consideration. The rate of population growth during this period will probably be close to, but no more than, the projected 1980-85 growth rate of 15% for the Town. The 1980 ratio of 2.23 persons per all housing units can be used if we assume that high housing costs will discourage a further decline in household size and that the proportion of vacant or available units will not change substantially. Table VI-15 applies these assumptions to the estimated Town population of 23,500 at the beginning of 1982.

Table VI-15

NEW HOUSING NEEDS: 1982-86

	<u>1982</u>	<u>1986</u>	<u>Change</u>
Projected Population	23,500	27,025	3,525 (+15%)
Assumed Ratio of Population/Unit	2.23	2.23	0
Estimated Units	10,538	12,119	1,581 (+15%)

It is estimated that 1581 new dwellings will be needed for expected new population. By itself, this figure has little meaning, since the projected population growth could only occur if sufficient housing were somehow made available. The more significant concerns here are the types and densities of needed units and the amount and location of land required. Because of continuing trends toward higher proportions of manufactured housing and small clustered units, the new housing needs for 1982-86 will probably be for the following breakdown of residential construction types:

Single-family homes	65% of all units
Mobile homes	25% of all units
Multiple-family structures	10% of all units

These percentages closely reflect the community preferences expressed in local attitude surveys and will maintain the low density character of the Town (See Residential Land Use Section).

The amount of land required for projected residential development can be estimated by analysis of existing housing densities. So as not to underestimate the potential demand for land for building sites, lower end density figures should be used for each type of unit. The figure for mobile homes used in the chart below is an average of mobile home park densities and single lot mobile densities (See density justification in Residential Land Use Section). All density figures reflect gross acreage required, including new streets.

Table VI-16

<u>Type of Unit</u>	RESIDENTIAL LAND NEEDS: 1982-86*			
	<u>% of All Units</u>	<u># of Units</u>	<u>Gross Density</u>	<u>Land Needed</u>
Single family	65%	1,028	2 units/acre	514 acres
Multiple family	10%	158	8 units/acre	19.8 acres
Mobile homes	25%	395	6 units/acre	65.8 acres
All Units	100%	1,581	2.6 units/acre (weighted average)	599.6 acres

*See also Residential Land Use Section

According to the Land Use section, the development of the 600 acres needed for housing from 1982 through 1986 would increase the developed residential acreage about 15%. The increase represents 20% of all remaining vacant land in the Town and a substantially higher proportion of physically developable land. The residential land use pattern proposed to satisfy future growth needs is presented fully in the Land Use section. There should not be any problem in making adequate sites available in Paradise for development for all needed types of housing in the next five years, but there could be

serious land constraints on housing in the long term especially if there is no alternative to on-site sewage disposal.

The new construction needs presented above do not include the number of substandard units which should be either rehabilitated or removed, and replaced. Based on the earlier analysis of the limited available data on the condition and age of housing units in Paradise, it is safe to estimate that at least 1% of the present housing stock is either not economically feasible to bring up to code standards or will need replacement by 1987. Based on that data and experience in other areas, it is also safe to assume that at least another 10% have need for substantial rehabilitation. Applying these percentages to the total number of existing housing units gives the annual number of units needing replacement or rehabilitation, as follows:

Table VI-17

REHABILITATION/REPLACEMENT NEEDS: 1982-86

<u>All Units (1-1-82)</u>	<u>Units Needing Rehabilitation</u>	<u>Units Needing Replacement</u>
10,575	10%= 1,058= 212/year	1%= 106= 21/year

With the Town's present limited involvement in code enforcement and/or rehabilitation programs, the above objectives would be nearly impossible to achieve. Looking realistically at the political and economic problems involved and the time needed to gear up for such programs, the maximum number of housing units which could be rehabilitated and renovated in 1982 through 1986 through any type of Town action or assistance would be about 300 and 50, respectively.

6.52 Five Year Schedule

The policies proposed earlier for each category of resource-constraint require several very different kinds of action in different time frames. Some of the policies on residential development need to be implemented through the land use plan map and accompanying text adopted with this Plan. These include policies on where mobile homes, mobile home parks and group care homes should be located (Policies under part 6.43). Two policies on development needing action very soon are the proposed analysis of certain

development requirements and construction standards in policies (6.43 a & b). The other policies on development and construction all require some type of ordinance adoption or change which should be undertaken within two years of plan adoption.

The first two policies on financing and transfer costs (Part 6.44) concern local positions on state and federal legislation and will require a continuous monitoring and lobbying on such activities. Prohibiting discrimination is a long-term federal and state policy which may be further implemented by local ordinance. Town staff and Council should monitor problems in the area of equal housing opportunities and propose a local program or ordinance if necessary.

Recommended policies on code enforcement, periodic inspections and demolition (Part 6.45) should be initiated within 6 months of Plan adoption as the Town's first serious efforts toward conserving and maintaining the existing stock of affordable housing. Policies on support of local programs, legal obligations, and resource conservation are all long range stands with rather open-ended requirements for here-and-now action. Keeping future costs of maintenance and utilities down by requiring energy-efficient design, allowing home occupations, and making developers pay for needed service facilities will require ordinance changes which should be initiated within one year of plan adoption.

All of the policies proposed in this element for protection of the residential environment must be implemented through revisions in the zoning or other local ordinances. The proposed standards should be developed carefully with further public input and should be implemented within two years of Plan adoption with the creation of a design review board.

Most of the recommended actions on housing assistance programs (Part 6.47) should be investigated very soon because of the long lead times needed to prepare applications and programs. The proposed referendum on a maximum of 100 assisted units for the elderly and handicapped should be put on the ballot as soon as possible by the Town Council. The Council should also give serious consideration in the next six months to applying for Community Development Block Grant funds. Other recommended activities require either support of legislation or assistance to local developers and programs.

Section VII

Community Development

COMMUNITY DEVELOPMENT

7.1 DEMOGRAPHICS

7.11 Population History

Early history could characterize Paradise as a mining center, logging area and later, as an agricultural settlement. Founded during the Gold Rush as a way station along the wagon trail between the gold mining towns of Oroville and Magalia, miners and other early settlers established homesteads along the ridge. Mining activity faded by the end of the century and in 1904 Southern Pacific constructed a rail line to the Diamond Match lumber mill at Stirling City. Retail business began to locate adjacent to the spur along the Skyway. Population of the ridge at the turn of the century serviced remnants of the mining industry, the lumber industry, the growing orchard agricultural base, and transportation employees. In 1916, the Paradise Irrigation District was established to provide irrigation water from Little Butte Creek to the orchard industry. At that time population was estimated to be 1,000.

In the 1940's, Seventh Day Adventist doctors from Southern California began practices in Paradise. Their professional and medical school contacts in Southern California began sending patients to Paradise for convalescence. The Feather River Hospital was established in 1950, specializing in heart ailments and gerontology.

Before 1950 good road access was available only to the County seat, Oroville. The Honey Run Road to Chico was a long, grueling trip. In 1950, however, federal highway aid was used to extend the Skyway to Chico. Much of Paradise's retail shopping was shifted to Chico and quick access from Chico to Paradise made the ridge a desirable living environment for persons employed in the Valley. Paradise's growth since that period is based in its environmental attractiveness, medical services, and access to employment and retail services.

From 1916 to 1960 population estimates and census counts for Paradise (the Paradise Irrigation District) are given in Table VII-1.

7.12 Recent Growth

The most dramatic growth in the Paradise area population began in the mid 1960's and continued to the mid 1970's. Publicity campaigns in Southern California and a reputation of the rural, mountain, small town environment drew thousands of migrants. Migrants were of older age in the early 1970's, giving the ridge of a median age of 56-58 years. Rates of natural increases

were characterized by a unique demographic condition where deaths exceeded births. (See migration statistics below in Table VII-3.)

TABLE VII-1
Historical Population Growth

Year	Paradise Population	Basis
1916	1000	Estimate (PID)
1930	2000	Census (Paradise Area to Stirling City)
1940	3600	Census (Paradise Area)
1946	4000	Estimate (PID)
1950	7300	Census (Paradise Area)
1957	8000	Estimate (PID)
1960	9750	Census (Paradise County Census Division) (Some areas in excess of PID)
1960	11119	Census (Paradise Area)

The rate of growth in Paradise, including the upper ridge area, has occurred at increasing and decreasing rates over the years. The increases for the period 1960 to 1980 are given in Table VII-2. (Note that increases for the first period are over 10 years and succeeding changes are for five year increments. For purposes of comparison, divide the first year period changes by 2.)

TABLE VII-2
Recent Population Growth

Year	Paradise	Increase	(%)	Paradise Area	Increase	(%)	Butte County	Increase	(%)
1960	9,750			11,119			80,030		
1970	14,539	+4,789	49.1	16,119	+5,793	52.1	101,969	+21,939	27.4
1975	19,239	+4,724	32.5	22,169	+5,257	31.1	120,901	+18,932	18.6
1980	22,571	+3,261	16.9	28,500	+6,331	28.6	145,500	+24,599	20.3

Several implications may be drawn from the data in Table VII-2. For Paradise, if interpolated for five year increments, the numbers and rates of growth were highest in the period 1965-1975. The number of new residents added between 1970 and 1975 exceeded almost 50 percent of the number added since that time. The amount of growth from 1970 to 1975 almost equalled the total amount for the previous 10 years. The Paradise growth rate and totals reached a peak during the early 1970's and has been decreasing since. Although the rates of increase for the Paradise area have begun to slow, those for Butte County continue to increase.

The difference in population dynamics between Paradise and the Paradise area is that the upper ridge is continuing to grow at a rapid rate whereas the Town is decreasing its rate. This is due to a number of factors including availability of lower cost smaller lots on the upper ridge, wider selection of sites, a coordinated state campaign for sales, a higher incidence of lower cost modular housing units and less need for high interest financing, a less congested, quieter environment, and other factors.

The total potential amount of growth for both the Town of Paradise and the upper ridge is generally constrained by available land. (See population projections in Table VII-5.)

Migration to Paradise has been the biggest component of population increase. Net migration is measured as the increase in population of the previous period.

The distinctive characteristic of net migration in Paradise is that it is larger than the total period increase in population. This is due to the rather high death rate as compared to the birth rate, and is typical of communities which have large retiree population. Birth, death, and migration data are given in Table VII-3.

Table VII-3
Migration to Paradise

<u>Period</u>	<u>Births Since Previous Period</u>	<u>Deaths Since Previous Period</u>	<u>Population</u>	<u>Increase</u>	<u>Net Migration</u>
1960			9,750		
1970	1,058	1,856	14,539	4,789	+5,586/10 yr.
1975	840	1,536	19,239	4,724	+5,396/5 yr.
1980	1,246	1,818	22,500	3,261	+3,833/5 yr.

7.13 Socio-Economic Characteristics

The socio-economic characteristics of Paradise residents has been taken from the special census for 1975, estimates made by the Citizen's Attitude Survey and from selected data gathered in the business and employment survey. The 1980 census will produce accurate data but will not be available until after the adoption of the Plan. The data should be integrated with the General Plan as it becomes available.

Policy

Update the General Plan with all current demographic and economic data as it becomes available and evaluate the impacts of the changes on plan policies programs and expected outcomes.

The 1975 special census for Butte County and the data collected for the Paradise area were reasonably accurate. Given the assumption that overall

socio-economic characteristics have not changed in the space of five years (except population increase), the data may be useful for review.

In 1975 the male-female ratio was 48% to 52%. Median age for males was 45 and for females 51. The median for both was about 48 years, compared with the 1980 attitude survey estimate of 45.2 years. These median ages are at least 20 years higher than other places in Butte County. The recent Citizen's Attitude Survey indicates, however, that with decreasing migration of older persons, the median age may be dropping. That survey also indicates that 20.7% of the population is under 20 years of age, 22.1% was 20-40, 17.7% from 40-60 and 39.5% were aged above 60 years.

The white Paradise population percent at 97.5 was the highest margin in Butte County. The county average is 93.6 percent with blacks and hispanics being the second and third largest groups. In Paradise, native Americans were the second largest racial group.

The median education level was 12.1 years while that for Butte County was 12.2 years, virtually the same.

Income in Paradise was somewhat lower than Butte County. Sixty-three percent of households earned less than \$10,000 in 1975 compared with 58% for Butte County. This income deficit is explained by the larger number of fixed incomes in Paradise. Estimated household income for Paradise in 1980 is somewhat higher, however. It is discussed in the employment and income section of the Plan.

7.14 Population Projections

One of the most important estimates in a general plan is for future population. The planning period and maximum reasonably effective period of time over which the general plan will be valid is ten years. Population and land use forecasts are often made for longer periods but the assumptions for the forecast often change in early periods. The forecasts in the long-run, become obsolete. A shorter-run forecast does not depend overly on assumptions about change.

A ten year planning period is preferable for a second reason. The attitudes, resources, population and land use characteristics, economic, and politics of a place can change rapidly. A town general plan, to be effective, must change with them or be amended to reflect the changing needs. Change in the factors listed above will invariably affect the population and whole nature of the community and thus the plan would be out-of-step. Plans must be constantly reviewed, amended, and updated. In so doing, forecasts must be adjusted.

A ten year forecast period is sufficient to initiate and provide fundamental direction to the planning process

The population forecasts for the plan were made using several techniques in an effort to account for several assumptions about change. A regression analysis was performed which compares the change in population to changes in other factors such as, natural increase, migration, vehicle registration, voter registration and school enrollment. These factors are good indicators of population change and may show a close association over time. If forecasts of the factors can be estimated, then a forecast of the population can be inferred.

A projection was also performed through a study of existing trends in population. The level of population is compared over time to assess the rate and direction of change. Once that rate and direction of population is established a trend and forecast can be made.

Both the preceding methods rely on the assumption that existing trends in the factors will continue through the forecasting period. This assumption must be made since there is so few bases for speculating otherwise.

One factor which may constrain present trends into the future is the finite amount of land and water resources which may be available for use. The physiography of the Paradise ridge allows only a certain amount of development until all vacant land is consumed. Such a saturation point is yet well into the future (30-40 years) and as the amount of land available for development becomes smaller, the development price increases and total coverage of the land cannot be achieved. Full development and an effective upper limit population should occur in the first quarter of the twenty first century.

Existing trends at the local level are the basis for the third projection technique. The ratio-correlation approach depends on an understanding of the relationship between the local population and the regional population. A comparison is made of the changing proportion of Butte County's population represented by the Paradise population. For example, Paradise has comprised 12.2%, 14.3%, 15.9%, and 15.5% of the Butte County population during the four periods given in Table VII-2.

The chief requirement of the ratio-correlation method is an acceptable forecast for the regional population. The State of California, Department of Finance has made such a projection of population for Butte County. Their forecasts are widely accepted and will be used here. Given the regional forecast and the trend in local population percentage, a future growth forecast for the Town can be made.

The three forecasts were prepared and the results are given in Table VII-4

Table VII-4
Town of Paradise
Alternative Population Projects

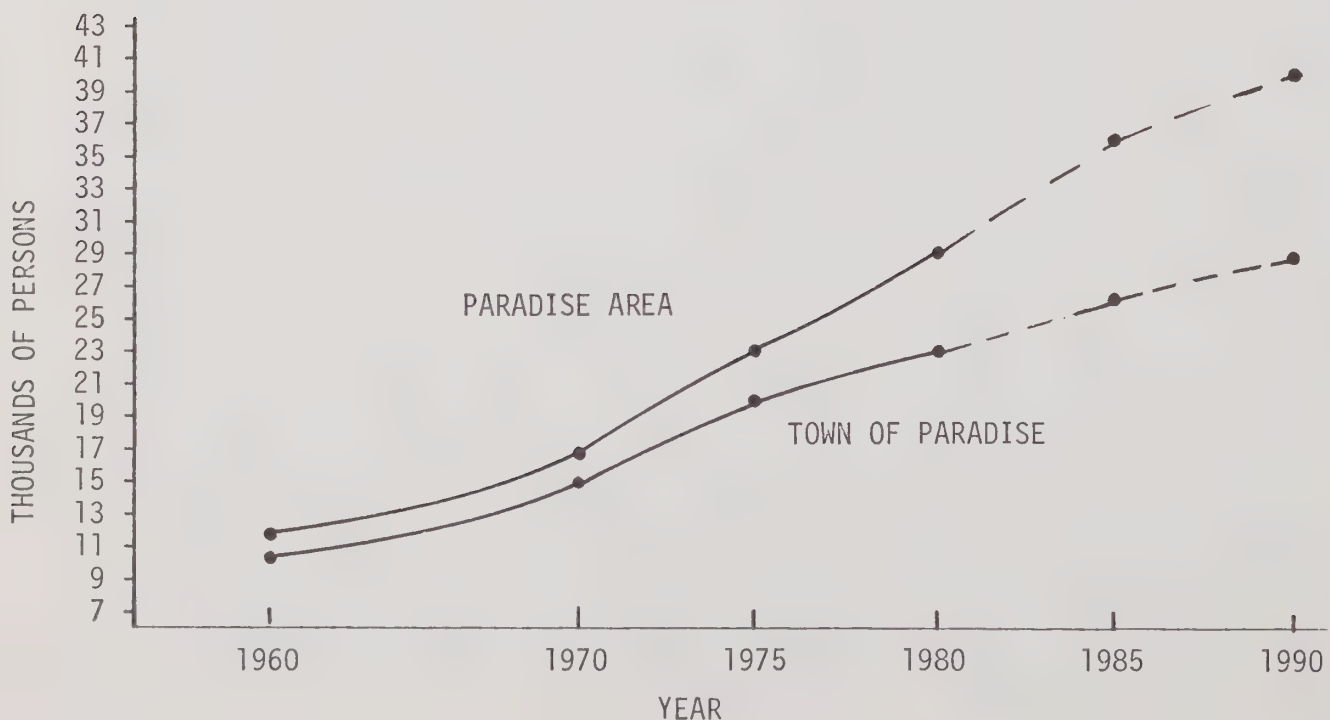
Method	1985	1990
Multiple Regression	25,480	28,785
Existing Trends	24,370	26,315
Ratio-Correlation	25,890	28,580

The ratio-correlation method was selected due to the availability of very recent and accurate State forecasts for Butte County and also because the forecasts yielded among the highest estimations of population. A higher estimation will provide a margin of safety for the change in population. The projection is hopefully a high estimate ensuring that the impacts of growth will not exceed those that can be reasonably anticipated. Projections for Paradise, the Paradise area (Lime Saddle to Stirling City) and Butte County are given in Table VII-5 and Figure VII-1.

Table VII-5
General Plan Growth Forecasts

Period	Paradise	Paradise Area	Butte County
1985	25,890	35,560	172,600
1990	28,580	40,700	193,500

PARADISE GROWTH FORECASTS
Figure VII-1



7.2 OVERALL LAND USE

Detailed measurements were made of land uses on all parcels in the Town. Aerial photographic checking and an exhaustive ground verification of uses were the basis for compilation of a land use base map. Measurements taken from this map have provided accurate estimates of the total amounts of land in each land use category. They are provided below in Table VII-6. They will provide useful comparisons for land use discussion elsewhere in the text of the Plan.

Table VII-6
1980 Land Use Acreage Estimates

<u>Land Use Class</u>	<u>Acreage</u>	<u>Percent of Total</u>
Residential	4,419	38.1%
Vacant	3,487	30.1%
Streets and Lanes	2,720	23.5%
Agricultural	282	2.4%
Commercial	266	2.4%
Public and Institutional	243	2.1%
Southern Pacific Right-of-Way	74	.6%
Parks	68	.6%
Industrial	20	.2%
TOTAL	11,597	100 %

7.3 RESIDENTIAL LAND USE

The residential environment of Paradise is its most unique and most desirable attraction. The interaction of climate, vegetation, and soils has provided Ponderosa Pine forests at the 2000 foot level and at higher elevations. The forested mountain environment, well defined by the Town limits, has been responsible for the growth and present population character.

7.31 Existing Residential Uses

The 1980 census indicated 10,123 housing units within the limits of the Town of Paradise. Of this number, 7,075 units (69%) are single family homes, 810 units (8%) are multi-family units and 2,328 units (23%) are mobilehomes either in mobilehome parks or on lots. The trend over the past ten years has been toward a decreasing percentage of single family homes and an increasing percentage of multi-family and mobile units. The percentages of mobiles and multi-family units have increased by 14% and the percentages of single family homes decreased by that amount over the past ten years. This is due in large part to the rising cost of single family construction, the rising cost of land and lot improvement and the high cost of mortgage capital. Modular housing

and smaller, higher density housing has become more economical to provide and lower cost to acquire. Housing market economics will probably not return to the levels experienced in the early 1970's and therefore the trend toward smaller units should continue. Single family units presently constitute 69% of the market and over the next ten years should stabilize at about 65%. Multi-family units presently at 8% of the market should level off at about 10% and mobilehomes now at 23% should stabilize at about 25% of the market.

These stabilization rates are reasonably consistent with the breakdown in housing types preferred by residents of Paradise. The Citizen's Attitude Survey showed the desired housing mix as single family 69%, multi-family 10% and mobiles 20%.

Policy

The present and desired future housing mix should maintain the balance in the residential environment that characterizes the present low density character of the Town.

Land in Paradise devoted to residential use is estimated to equal 4,020 acres or about 26% of the total area of the Town. Virtually all of the land is occupied by single family or mobilehomes. Only 2% of that residential land (about 90 acres) is occupied by multi-family units.

When streets and lanes are included in the total land coverage in residential areas, the proportion of land in residential related uses is much higher. A computation of street coverage in the Town estimates that they comprise 2,495 acres, or 22.5% of the land area. Total residential areas then, including streets, is about 6,515 acres or 58.5% of the area of the Town.

The pattern of existing residential land use is best described by the 1980 land use map. Multi-family uses (including group quarters) are found predominantly in central Paradise and in close association with commercial land uses and central traffic arteries. High intensity residential use is found along Elliott, in downtown Paradise and between Elliott and Central Park Drive, Clark and the Skyway.

Mobilehomes in parks and on individual lots are much more pervasive in the Town. They may be found scattered throughout Paradise. Mobilehomes in parks are located for the most part along Clark Road, upper Pentz Road, and along major collector streets in central Paradise. A few others are scattered along upper Skyway. Mobilehomes on lots may be found throughout the Town but are found most concentrated between Elliott and the southern Town limits between Clark and a line connecting Edgewood and Kibler. Other concentrations of individual mobiles lie north of Bille between Skyway and Clark.

Single family frame homes on 1/4 acre and larger lots predominate throughout the Town with the exception of the southern one third or "banana belt" zone. This zone across the base and lower elevation of Paradise is infiltrated by canyons, drainage channels, and hilly terrain. This is also the zone where volcanic rock and cemented mud flow rock is exposed at the surface with less available soils for on-site waste disposal. In this one third of the Town, vacant and generally non-buildable land predominates. Residential land there is discontinuous; is characterized by large lots (most of which remain in a natural condition); and is poorly served by roads. In some areas water pressure in PID lines is low, a serious problem for fire fighting and accessibility by fire equipment is difficult. The southern zone of the Town also contains numerous vineyards, some orchards, and grazing land.

7.32 Vacant Land

The extent and suitability of vacant land for residential use is important to the discussion of existing and proposed land use. Level, vacant land which is accessible is common in Paradise. (See Land Use Map.) Through central and upper Paradise there are many incomplete subdivisions, frequent vacant parcels facing on collector and local streets, large vacant tracts of previously agricultural land, numerous tracts of semi-land locked land and an abundance of large parcels on which a single residence occupied a fraction of usable space.

In the southern and southeastern extremities of the Town is the largest acreages of vacant land. As was previously discussed, however, the land is largely unsuitable for development and should not be considered a significant part of the reserve for future growth needs of the town.

7.33 Proposed Residential Land Use

Residential Land Use Goals:

Protect and enhance the rural, natural, and mountain residential environment.

Residential areas should be visually coordinated, functionally designed and aesthetically pleasant.

Encourage residential development which promises to maintain safety, neighborhood stability, and attractiveness for future residents.

7.34 Amount of Residential Development

The total demand for residential land, the number and type of additional units required to house that population, and an estimate of the amount of land required for each type of dwelling is determined by the expected increase in population (Demographic Section).

The population forecasts provided earlier and current gross estimates by the 1980 census of 2.23 persons per household, permit an estimate of future levels of housing demand. Expected additional units to be constructed over the next 10 years are given in Table VII-7. Based on past data, present estimates of the relative breakdown of housing types and expected stabilization levels of that proportionate breakdown, the table allocates expected number of additional units to single family, mobilehome, and multi-family classes.

Table VII-7
Planning Period Housing Class Demand

Year	Total Units @2.23pph	Additional Units	Proportion of Single Family @65%	Proportion of Mobiles @25%	Proportion of Multi-Family @10%
1980	10,123				
1985	11,610	1,487	966	372	148
1990	12,815	1,205	783	301	121

The amount of land required for residential development is estimated on approximately existing densities. Single family residential lots in Paradise have a mean size of between 1/3 to 1/2 acre. Subdivisions with 4 units to the acre are uncommon. Mobilehomes occupy variable sized lots from about 6-8 to the acre in parks to large lots where they are individually sited. Multi-family units are generally found at densities of 8-12 per acre in Paradise.

So as not to underestimate the potential demand for land by each unit built in the planning period, the lowest density coverage in the range for each will be used. For future units single family units will be assumed to be added at an average of 2 per acre, mobiles at 7 per acre and multi-family units at 8 per acre. In all likelihood the densities will be slightly higher for each and less land will be required. Table VII-8 provides estimates of land required for residential purposes during the planning period.

Table VII-8
Projected Residential Land Demand (gross acre estimates)

Year	Single Family	Mobiles	Multi-Family	Total
	@ 1/2 acre	@ 1/6 acre	@1/8 acre	
1985	322 acres	62 acres	12 acres	396 acres
1990	<u>261 acres</u>	<u>50 acres</u>	<u>10 acres</u>	<u>321 acres</u>
TOTAL DEMAND	583 acres	112 acres	22 acres	717 acres

A total demand of 717 acres will increase the present residential acreage from 4,017 acres to 4,734 acres or an increase in acreage of 18%. This represents about 20% of all remaining vacant land in the Town and a substantially higher proportion of suitable development land.

7.35 Proposed Locations for Residential Development

The most suitable locations for future residential development are, in part, guided by their impact on the surrounding residential and physical environment and their need for access to arterial roadways and shopping.

Multi-family housing, if it is not planned as a part of a mixed use development cluster, should be located in association with other higher intensity urban uses. The intensity of multi-family development interns of building design, parking and traffic generation would create nuisances unacceptable in a low density residential environment. For this reason they should be placed nearer the center or downtown area of the Town, near and in association with major shopping areas and along major traffic corridors.

Policy

High density residential development should be limited to main highways, commercial areas or high intensity use areas.

The proposed land use map for 1992 indicates the pattern of existing and suitable future locations of multi-family housing. These areas include Elliott Road between the SP right-of-way east to an area just east of Copeland Road, the zone of land to the east of Skyway central business district and adjacent to the SP right-of-way, portions of land adjacent to the lower Skyway at the portals of the Town, and generally areas along the Skyway and Clark Road corridors. These uses should be restricted to these and other central locations to minimize travel distances from concentrated populations, facilitate public transit on such routes, promote shorter distance pedestrian travel to shopping areas, and promote the efficiency of fire and public services to the maximum number of citizens in the shortest period of time.

Mobilehome parks have similar unit density characteristics as multi-family housing but at the same time, they have substantiated different use characteristics. In Paradise, mobilehomes in parks generally house senior citizens who have reduced trip generation potential. They generally operate fewer vehicles and do not contribute to work trip flows. Units in mobile parks are usually owner occupied and better maintained in a fashion compatible with low density neighborhoods. Also, though they represent a somewhat higher population-density, the perceived structural density and activity patterns are far below

that of multi-family units. There is less transiency and a higher respect for neighborhood values of privacy and quiet.

Given the general nature of mobilehome parks in Paradise, it is recommended that they be encouraged to locate in association with commercial, multi-family, and public use areas but that they also be allowed entry to mixed density residential neighborhoods and those where other mobilehomes predominate.

Policies

Encourage mobilehome parks to be located in association with existing multi-family, commercial, and public service areas to minimize travel distance and encourage walking to convenience areas by higher density populations which generally occupy them.

Allow mobilehome parks in mixed use residential or public use areas or in areas where mobilehomes predominate conditional upon design and subdivision requirements which are compatible with lower density residential areas.

Single family residential zones make up the largest proportion of all land in the Town (34%). Typified by uneconomical land use designs characterized by numerous vacant lots and land locked properties. These parcels can provide the basis for substantial infill residential development over the next 10 years. The land reservoir for development in central and northern Paradise is substantial. Sufficient vacant land for residential development is available without drawing on land presently devoted to agriculture or land which is marginally suitable for such use.

It is recommended that the Town use these bases for directing and allowing future development.

Policies

Future residential development should be directed to vacant, non-agricultural parcels in existing built up residential neighborhoods.

Land locked parcels of level vacant land in existing residential areas should be used for residential purposes to ensure compact, efficient, and more easily served neighborhoods.

Program

-Acquire public access easements to land locked parcels where feasible.

Policy

The Town should encourage the divisions of suitable land for the purpose of providing needed residential parcels.

The southern portion of Paradise is characterized by a very hilly, rocky, brush covered, and poorly accessible environment. Also, it is the zone of high fire hazard, erosion, flood, and earthslide hazard.

A different set of conditions require a fundamentally different approach to residential land use management.

Ridges on which major north-south access roads are placed have provided corridors of reasonably level land and associated fingers of residential land. These residential corridors are flanked by steep sided washes, ravines, and canyons with high slope instability and fire hazard. The ridges themselves provide little safety from upslope grass and brush fires and are marginally supportive for normal residential use. The ridges and canyons are environmentally sensitive and easily degraded.

Land use decisions must be made with a concern to the impact of development on the sensitive south Paradise environment.

Policies

Discourage residential development on slopes of canyons, ravines or washes where slope, flood, erosion, fire hazards or unique and sensitive vegetation, fauna or archaeological resources are present.

Construction in swale or watershed drainage basins should be by special use permit only.

Establish setback standards for residential development in areas near canyons to minimize hazards and maintain natural open space aesthetics.

Minimize allowable residential densities in areas with shallow soils and presence of unique natural and archaeological resources.

Mobilehome residential uses on individual lots are a very common dwelling form in Paradise. They are especially appropriate for senior citizens who wish to devote more time to leisure activities and citizens in general who prefer to devote a smaller proportion of their income to housing costs. They are functional and can be attractive dwelling forms when coupled with design and landscaping controls. They serve the same needs and can be compatible with traditional residential neighborhoods.

California State law now guarantees locational freedom for mobilehomes which previously were denied access to traditional frame home neighborhoods. State laws have been enacted to permit manufactured homes in all single family residential areas. (See California Government Code, Section 65583(c)1 and 65852.3.) The aesthetics of traditional neighborhoods would be maintained by ensuring that mobilehomes met parking, architectural, aesthetic, and square footage requirements consistent with the surrounding neighborhood. These requirements or standards will have to be adopted before permits may properly be issued for mobilehome uses.

Policy

Allow mobilehome uses in all single family residential areas of the Town.

Program

-Establish standards and conditions applicable to the placement of mobilehomes in residential neighborhoods including those regarding exterior architectural requirements, aesthetics, and minimum square footage requirements.

7.36 Development Conditions for Residential Areas

Prior to Town incorporation, there was little land use decision consistency and virtually no local planning or development standards for neighborhoods. The County zoning and subdivision ordinances were ill-suited to the Paradise environment and with the exception of the Central Butte County Study little trouble was taken to establish baseline standards for development in the Town's residential areas. Recommendations for updating local ordinances and standards will include revision of the Town subdivision ordinance, zoning ordinance, and street and highway codes. (These are given in the Regulatory Devices section of the Plan.)

Policies intended to maintain environmental standards for residential developments have been developed and revised in conjunction with the Citizen's Land Use Policy Committee. They are presented here as improvements, design, and aesthetic policies.

Residential Improvement Policy

No residential area should be developed without adequate sewerage disposal, adequate water supply, paved or rock surfaced streets, and other appropriate utilities.

No residential development should be approved that does not meet standards for access, safe negotiation, and turn around set by Town fire and police departments.

There should be a limit to large scale residential development until a master drainage plan is adopted.

Program

-Prepare a grading ordinance consistent with the Town drainage plan.

-Require dedication of space along the street frontage where necessary of proposed residential development for eventual use in a pedestrian walkway and pathway system.

Residential Design Policies

Through traffic should be discouraged in residential neighborhoods.

Encourage a wide range of housing choice in cost, design, and variety of lot sizes in residential areas.

Provide distinct separation between residential and non-residential land through the use of natural barriers, zoning, transitional uses, open space, and site design features.

Ensure that all subdivisions of 5 parcels or more with proposed residential development, the developer submit design and landscaping plans and receive approval by the Planning Commission prior to issuance of the building permit. In this way quality, efficient, and safe neighborhoods, consistent with the Paradise environment, will be assured.

Program

-Appoint a review board of design professionals to study and provide advisory input to the Planning Commission on design considerations of subdivisions or proposed non-residential development.

Residential Aesthetic Policies (see also Aesthetic Quality Element)

Residential areas should be protected from smoke, noise, air pollution, litter, fixed light glare, and other nuisances.

Encourage development of residential projects that are attractive, both from within and without, through a continuing program of civic beautification, maintenance of homes and streets, and other measures which will promote an aesthetically desirable environment.

Maintain a rural, mountain, low density environment in residential neighborhoods and allow no development which will degrade that character.

Greenbelts and open spaces should be encouraged throughout the Town to ensure a rural character and to minimize the impact of residential use on the environment.

All residential buildings should have sufficient land set aside for landscaping or natural vegetation to maintain the aesthetics of the Town.

7.4 COMMERCIAL LAND USE

GOALS: Promote the economic health of Paradise business through sound planning; consistent with needs and expressed desires of the citizens and with the aesthetic and environmental sensitivity of the Town.

Concentrate regional and community commercial services in compact designated areas to avoid strip development and scatteration detrimental to public health, safety, conservation of energy, residential integrity, scenic continuity, and the rural residential character of the Town.

Encourage upgrading of commercial facilities, services, and aesthetics in the Central Business District to increase the economic viability and attractiveness of Paradise's traditional shopping areas.

7.41 Existing Land Use

Paradise is marked by a transition from traditional commercial uses typical of the small town community of the 1950's and early 1960's. Traditional uses serviced nearby small populations. They were locally owned and were located essentially along the Skyway, with concentrations above Pearson. Other businesses were located at a few locations along Pearson and at intersections of Clark Road with Pearson, Elliott, and Bille.

As the population of Paradise has grown, the nature of commerce and the extent of its use of land has changed. Larger market populations could be served by more numerous traditional sized businesses but probably not at a level of efficiency and variety demanded by larger populations. A shift away from the small shops and markets is occurring. Larger scale business with outside ownership and capital requirements have taken the surplus market and with its more intensive promotional devices and marketing techniques has captured the market previously served by smaller businesses. The larger scale business also offers products and services not available locally and provides a more attractive shopping environment.

Initially business located on the north end of the central business district. As the population center shifted east, locations along Clark Road became attractive and more accessible from the Paradise Pines market area. The present mix of commercial uses has resulted in a competition for commercial dominance between Clark Road and the Skyway.

Commercial use of land may be classified by the scale of those uses. Traditionally the highest level of commercial scale is the central business district (CBD). Succeeding levels include shopping centers, neighborhood centers, neighborhood businesses, and home-based business.

Central business districts are characterized by the highest concentration of business uses in a city. They are the traditional core of the Town and include central government offices, traditional and local owned commerce, banking, finance and real estate uses, office space, and the largest concentration of retail floor space. The Paradise CBD is located along the Skyway generally between Black Olive and the north side of the Center Street area shopping center.

Through the late 1960's the Paradise CBD was the focus for most commerce practiced on the ridge. Its two supermarkets, park and public halls, variety of dry goods, hardware, banking, auto and dining services supplied most of the convenience and necessity demands of residents.

The CBD possessed a rustic, mountain character that typified the Paradise environment. Its stores and services exemplified the desirable traits of a slower paced, traditional and simpler lifestyle that had disappeared from much of the rest of the State's urban places. Such was the style of the town and the CBD.

As Paradise grew in popularity and population (its most rapid increases occurred in the late 1960's and early 1970's) traffic along the Skyway increased. The reaction of Butte County traffic planners was to widen the Skyway so that greater vehicular loads could be accommodated.

The widening of the Skyway was the first of two major setbacks to business in the CBD. The widening project changed the rustic, open space character of the downtown. Access and parking were taken from each business and not compensated in kind. But the worst impact of the project was to destroy the attractiveness of the roadway. The mountain roadway became an urban highway. The traffic was accelerated and any attempt to slow or stop, to browse or buy was dangerous. Citizens had to and still do encounter substantial risk in trying to leave the flow of traffic, to park in front of a business or re-enter the Skyway flow.

The location of the Paradise CBD had always been convenient to the center of the Town population and remains central to most of the movement of people into and out of the Town. The Skyway afforded the best access to commuters and was close to most of the ridge population.

With the growth of Paradise to the north and east and with the rapid growth of the Paradise Pines area the center of population moved steadily away from the CBD. This was the second setback dealt to business in the CBD. The downtown was becoming less convenient. The development of commercial activity along middle and upper Skyway, along Pearson and at Clark Road and most recently at Clark and Wagstaff have been responses to provide higher levels of service more conveniently to the market population. The outlying centers provide a wider range of goods, one-stop shopping, convenience to place of residence and very importantly, abundant, safe parking.

New business establishments outside the CBD would not harm its vitality if they served only the needs and demands of new population. In fact, new businesses in Paradise have capacities greater than the new market population and effectively capture a part of the market of the CBD. Shopping is thus bled away from the CBD to new centers. The Paradise central business district requires changes to reaffirm its economic viability.

7.42 Site Factors in Commercial Location

Site factors are very important in planning commercial location. They include such elements as the physical environment (for example soil characteristics, slope, drainage, geology, and vegetative cover), parcel size and shape, land improvement and design costs, zoning and other governmental restrictions, and tenant mix.

In Paradise, soil characteristics restrict the intensity of urban use allowable. Either shallow or impermeable soils make on-site sewerage disposal very hazardous. (See discussion of soils in Hazard Section.) Where large volumes of liquid waste are disposed of daily and sanitary sewers are not available, deep, permeable soils are absolutely necessary. Generally, adequate soils are found in northern and central parts of the Town.

Policy

Prohibit the location of high volume water consumption commercial activities in those areas of the Town where soil conditions are not suitable or are marginally suitable for on-site waste disposal.

Slope and drainage conditions in Paradise are controlled by the geologic origins of the ridge plateau and subsequent dissection by overland runoff. (See discussion in Natural Resources Section.) Generally, there is a uniform low gradient from north to south. The only significant abruptness in land slope occurs along the edges of the Town at the Butte Creek and Feather River canyons and along the four major north-south trending drainage basins. Slopes in these areas are especially sensitive to urban use due to their unique and attractive natural vegetation, unstable surfaces, high rainfall runoff and discharge, and consequently high erosion potential. These areas pose higher construction costs and higher public services costs.

The high ecological sensitivity of these drainage basins susceptibility to degradation by on-site or adjacent large scale commercial development will cause immediate and long-term environmental and hazard related problems.

Policies

Construction on slopes greater than 30% or in substantial swales should be by special permit only.

Construction on slopes greater than 30% should be limited to large lot residential, agricultural or open space related facilities.

Disallow any commercial or industrial development which requires substantial surface grading to the degree that soil erosion, instability or water quality will be threatened.

Programs

- Adopt a grading ordinance which specifies the conditions under which and degree to which surface grading of commercial and industrial sites will be allowed.

- Enforce the provisions of the Uniform Building Code with regard to grading as an interim measure.

Vegetative cover, especially the pine forests of Paradise, are a valuable resource and trademark of the Town. In the past, they have not been regarded so by commercial developers. Evidence of the early natural stands of pines are noticeably absent. Intensive commercial development has caused widespread clearcutting of trees, crude site grading and indiscriminate paving of previous land surfaces. Extensive tracts of denuded land exist along the frontage of lower Skyway, middle Pearson, Pearson and Clark Road, and the southeast corner of Clark and Wagstaff.

Sensitive commercial tract developers respect the value of retaining natural vegetation. Natural vegetation is a positive site-enhancing factor which increases the visual appeal of a development site. Many such sites remain in Paradise and the recognition of their value by the Town and developer becomes an important consideration in public and private commercial development planning.

Policy

Prohibit any commercial development which does not maximize use of natural vegetation or replace any which is removed with local species of trees.

Program

- Establish a building and landscaping design review committee to review plans for commercial area tree retention and landscaping.

Parcel size and land use restriction are important to developers of commercial centers. Commercial development on the scale of a community shopping center, with about 200,000 square feet of floor space serving market populations from 40,000 to 50,000 require at least 10-12 acres of vacant level land area. Parcel shape must be reasonably rectangular with roughly one quarter of the perimeter fronting on a major arterial roadway or direct and immediate access to one.

Parcels with these characteristics are common along the major arterials of Skyway, Clark Road, Pearson, Bille, Wagstaff, and Pentz Roads. Many have already been assembled into appropriate sized community shopping centers at Skyway and Center Street, Clark and Pearson, and Clark and Wagstaff. Others are available at various locations to be discussed later.

Land, improvement, and design costs are additional site factors that commercial investors and developers consider in siting a shopping center. Land costs can be minimized when much commercially zoned land is available on the market and many desirable locations for the center are available. This sort of situation exists with the present zoning district design and availability of lots in Paradise. This oversupply of properly zoned commercial land allows a substantial savings or profit to the developer with little benefit to the community. The chief disadvantage to the community is that competitive bidding will lower land prices, and a site may be selected which may not further planned growth and development. When the developer has unrestricted choice of sites, the community will have little influence on economic forces which shape the community into a haphazard pattern.

It is important that the community determine which areas would best serve Town commercial development goals. The community, in designating areas best suited to commercial development through removing inappropriate commercial district zones, is in effect limiting the alternatives for the developer and fostering rational land planning.

These concerns are well supported by responses to the Citizen's Attitude Survey. Town residents recognize the need to limit the haphazard spread of commercial land uses when 54% wished to see businesses concentrated in a few centers.

Policy

Permit community scale commercial shopping centers at only a few carefully selected locations in the Town. These locations should be determined through study of the direct costs to the community, potential environmental degradation, traffic hazards, air and water pollution, and overall impact on community circulation and impact on existing business.

Tenant mix is important to a developer in preparing a proposal for a commercial project. In a community scale shopping center one to three anchor (major chain) stores are desirable. Any new community shopping center mix should include a major chain department store. The present and projected market area population is large enough to support it. The Citizen's Attitude Survey indicated such a facility would best satisfy shopping needs that residents must now travel outside of Paradise to find.

Policy

Encourage a mix of business services which are determined by the community to best fill actual needs and demands to Town residents.

Programs

- Request active Chamber of Commerce efforts to attract a major department store outlet.

- Coordinate public and private efforts to locate appropriate sites for business services most in demand.

7.43 Locational Factors

The location of a community shopping center with respect to the population to the market area and traffic arterials is generally considered more important than any mix of site factors given above. To ensure maximum accessibility to the shopping center, developers try to centralize the facility or make it as convenient to as large a portion of the community as possible.

In Paradise, including the shopping population of Magalia and Paradise Pines, the population center lies generally between Skyway and Clark, and Pearson and Wagstaff. The southern limits of the area have recently become more and more peripheral to the population center and there is a much higher accessibility to the total population at points north to Wagstaff. However, as development takes place along Paradise's southern "banana belt," the Pearson shopping corridor may re-emerge.

A second element to the importance of accessibility is the location of a shopping center with respect to major streets or arterials. Business uses rely on exposure, rapid and convenient vehicular access. This access can be provided only by the main through-town or cross-town roads. In Paradise these are the Skyway, Clark, Pearson, Elliott, Bille, and Wagstaff Roads. Each traverses the length and breadth of the Town linking all major collector streets and in turn all local streets and private lanes.

Commercial developers recognize the importance of arterial streets and better still their intersection. Intersecting arterials have the best access to the population of any places in Paradise. The parcels of land around those intersections, then, are the most desirable of all sites in Town and as population and demand for goods increase, the developer begins steps to acquire those sites.

The business sites in Paradise accessible to most of the population of the upper ridge are the intersections of Skyway and Clark with Pearson, Elliott, Bille, and Wagstaff.

Left to themselves, market forces would develop all arterial intersections in commercial uses and probably the frontage of all properties on those roads between the intersections. The visual aesthetics of a drive along any of those roads would be characterized by a disharmonious barrage of concrete, multi-colored, styled and shaped buildings, an endless ribbon of signs (moving, stationary, blinking, and beckoning), a river of moving and parked vehicles and very little, if any, remaining vegetation. The appearance of lower Skyway between Pearson and Elliott exemplifies what time will do to the main arterials in Paradise. Only community planning and business location management through zoning will allow Paradise to retain its rustic mountain character along its most visible corridors.

Policy

Manage the location of commercial shopping and business centers through the use of zoning and positive business incentives to provide the Town with necessary goods and services while simultaneously preserving its natural, rustic, and open appearance.

Provide adequate area for business and commercial use as is necessary to serve expected levels of population during the planning period.

Channel proposed new commercial uses into designed community commercial shopping areas.

Ensure the quality of commercial development through commercial development permit requirements.

Ensure that commercial development is in conformance with Town standards regarding signs, lights, landscaping, on-site circulation, parking, drainage, site, and building design.

7.44 Market Factors

The size of the market area population, its age and its income characteristics determine critical threshold levels below which business cannot operate profitably. A gasoline service station may require only a few thousand customers to operate profitably. With a large market area population many such stations may operate profitably. If another station is opened, however, it takes business away from all the others until one of them fails and equilibrium is restored. This will not occur if the population increases to serve the new business.

This market principle is primarily responsible for present instability in Paradise businesses. The present market area population of about 30,000 persons will support only a certain number of large volume supermarkets or discount and hardware stores. Community shopping centers require 10,000-40,000 persons

for support depending on total floor space and local levels of income and expenditure. There are presently an equivalent to 2-1/2 community centers serving the Paradise market. Another shopping center would capture much of the existing market for other centers and they would all operate at a loss until one center or a collection of tenants failed in business. Depending on the strength of financial backing of the new enterprise, and if it is an outside chain with deficit operating capacity, the locally financed business will generally be unable to compete. The failure of one business and success of another leaves levels of service unchanged except that local enterprise is discouraged.

The impact of new commercial development proposals on existing business must be studied before approval. Market factors should be studied by government as well as by investors and developers to determine feasibility, fiscal impact on the community (especially increased costs to police, fire, public works maintenance, and other services), and impact on existing business.

Policy

Require a fiscal impact analysis and market demand study be prepared by any applicant for a commercial center development permit. These studies should be submitted as a part of the requirements for environmental review and be certified by the Town fiscal officer before approval of the development application.

Programs

-Prepare a fiscal impact analysis of the cost of the proposed development to fire and police services. Study the effect on local fire ratings and the costs for additional fire and police equipment, facilities, personnel. Require the increased costs be paid by the developer or tenants of the center in the short and long term rather than by the citizens of the Town.

-Ensure that all governmental, administrative, and planning costs associated with the development be paid by the existing or revised permit fee structure or through a business tax.

7.45 Neighborhood Scale Business

The site, locational, and market factors which were discussed for community shopping centers operate in much the same way for neighborhood and home businesses. The obvious differences in the scale of business translates to a similar difference in the scale of importance of the location factors. Neighborhood and home business creates less impact on the land, are less dependent, and can less afford prime arterial location. They operate on a much smaller threshold market population so that entry into the business community creates less of an impact on remaining business. Neighborhood class shopping centers require about 100,000 or less square feet of floor space, 15,000 persons in the neighborhood

market require one supermarket and generally one variety store as anchors. The shopping complex at Clark and Pearson would technically be classed as a neighborhood serving facility although the many businesses at the intersection provide service to the whole community.

Neighborhood centers require similar site conditions as do community centers. High water consumption facilities such as supermarkets and laundromats require large areas of leachable soils for waste disposal.

Locational factors for neighborhood scale businesses are less rigorous than for larger centers. They must be sited along a major traffic arterial or at the intersection of major collection streets, but they need not have the highest level of access. For this reason there are many more suitable locations in Paradise than those sought by larger shopping complexes. Here again, without some sort of preferred locational pattern imposed by the Town, these centers would locate in a haphazard fashion creating adverse impacts in sensitive environmental or residential areas. The present zoning district scheme permits virtually unrestricted development along main arterial corridors and locations in more sensitive residential areas with approval of a use permit.

Policy

Revise the existing zoning district pattern to limit the inappropriate location of neighborhood commercial centers.

Program

-Rezone much of the existing C-2 commercial districts to less intensive uses retaining only those few where commercial development is desirable.

Policy

Allow expansion or development of new neighborhood commercial centers only where a local need and market exists as demonstrated by a market study to be conducted as a part of the environmental impact assessment.

Other neighborhood businesses include well over 500 establishments, or 2/3 of all Paradise enterprises, which are located singularly along arterial and collector streets. For the most part they are located in appropriate zones but not well planned locations.

Individual neighborhood businesses have substantial impact on the quality of the neighborhood. A wholly residential, agricultural or open space area when intruded upon by such a business creates a sharp contrast in use, a conflict in the expectations of property owners, the introduction of nuisances incompatible with the neighborhood, and instability in property and tax values.

Individually, the conflict is a reversal of the legal expectations by citizens of their rights to use private property in a certain guaranteed way. Cumulatively, many such single businesses strung out along a roadway as along upper Skyway, middle Clark or middle Pearson, will transform the character of residential or open spaces to resemble the strip commercial development typical of southern California cities. Strip commercial development by individual, unrelated planning decisions on individual unrelated business applications is unwise use of community resources, an invitation to safety hazards, and an inevitable cost to government and citizens through increased public service expenditures. Locational decisions for individual neighborhoods serving enterprise, due to their potential impact on the community should be rationally planned and not left to individual, self-serving goals.

Policy

Permit infilling of individual businesses in designated strip commercial development.

7.46 Home Business

Home business and entrepreneurship has been the historical foundation of innovation and the initial basis for growth and success of business and industry in America. Home business and industry often termed "cottage business and industry," is an efficient ground for experimentation, ideas, innovative schemes, and techniques for business advancement.

Policy

Where feasible home business should be permitted in all areas of Paradise.

The Town has the responsibility to allow the development and operation of small business or industry within the confines of home or reasonable normal auxiliary buildings for any resident of the Town. This right should not be abridged or curtailed by land use regulation or municipal codes so long as the business proponent agrees to respect certain conditions of that use. None of the conditions should be so restrictive as to inhibit the practice of reasonable forms of enterprise consistent with the character of the surrounding area.

The Town should, before allowing such enterprise, receive agreement from the business person that certain restrictions will be obeyed so that the quality of life in the neighborhood will not be degraded by the operation of the business or operation.

Policy

Allow home business and industry in all residential areas of the Town subject to the following performance conditions:

1. That the scale of the business or industry is not greater than space requirements for normal household use and those of commonly available auxiliary structures.
2. That the business or industry be operated completely within the confines of the above building except for the sale of agricultural products.
3. That the business not generate substantial/vehicular or pedestrian traffic as to create the impression of traditional neighborhood business operation.
4. That the business not use exterior lights, generate noise, glare, smoke, or dust incompatible with the neighborhood.
5. That the business use only minimal exterior signs to be specified by a Town sign ordinance.
6. That the business not require more than one employee living outside the household/business location.
7. That no business related materials be stored or activities be carried on outside of buildings on more than an incidental basis.

7.47 Plan for Commercial Development

Recommendations for commercial development include the foregoing policy recommendations and the following area specified recommendations.

7.471 Central Business District

It is proposed that a program be undertaken to revitalize the economic stability and importance of the central business district. The program should include a number of elements: (1) expansion of existing or establishment of additional community serving shopping facilities to include a major department store outlet; (2) adoption of a central business design improvement, landscaping, and beautification program; (3) establishment of a Paradise Home Business Trade Center to show and market the products of local "cottage business and industry"; (4) acquisition of well located properties and creation of public parking at points within the CBD combined with a program to encourage the improvement of off-street parking facilities on existing commercial lots. This four point program of public and private improvements will help to reverse the imbalance in economic development caused by existing and proposed development along Clark Road. The improved level of services, especially the attraction of a department store, would reassert the importance of shopping downtown.

Almost 39 percent of the residents of Paradise expressed interest in having a department store. Attraction of customers to that facility alone would create benefits of other downtown business. A balance of economic activity in the Town will reduce the business failure rate on lower Skyway, increase sales tax revenues, and total tax income to the Town.

Policy

Identify and zone areas for commercial activity that will stimulate the balanced economic development of the Town, with special consideration for lower Skyway.

Encourage the Paradise Economic Development Commission to actively promote commercial development on the lower Skyway.

Programs

-Assemble parcels of land of at least 10 acres adjacent to the Center Drive development, in the area of the Flea Market or in some other available property on the lower Skyway, or encourage the amplification or better use of existing floor space in order to attract additional community commercial uses.

-Work with the Paradise Chamber of Commerce to attract a major department store outlet for location on the lower Skyway.

-Work to promote downtown business through adopting a downtown theme, business services brochures, downtown fairs, sales, demonstrations, and events and other activities intended to present the downtown as the commercial, social, and activity focus of Paradise.

-Promote installation of sewer lines along lower Skyway to facilitate the revitalization of downtown business.

Much of the earlier attractiveness of the CBD can be restored through a systematic program of commercial area improvement. The natural landscape and rustic atmosphere can be returned through a public/private partnership in downtown improvement around a theme or program of design standards.

Policy

Encourage the advancement of programs that will increase the visual attractiveness of commercial areas, especially in the Central Business District.

Programs

-Adopt a program of commercial design improvement in the CBD consistent with a theme based on the historic character of Paradise or its mountain environment.

-Encourage establishment of a downtown business association to advise the Town on standards for structural, facade or ground improvements for the downtown area.

-Establish landscaping standards and a program to bring as much vegetation back into the CBD as possible.

-Adopt a program to provide continuous covered pedestrian walkways along sections of the CBD, alcoves and benches for pedestrian rest and conversation and protected walkways and crosswalks.

-Investigate the use of special sales tax, improvements assessment district formation, and tax increment financing as means to finance downtown improvement projects.

-Review available federal grant programs which target downtown revitalization.

One of Paradise's most unique resources is the high incidence (over 15%) of home operated business and industry. This "cottage business and industry" is a resource which has no organized or recognized outlet to the Paradise, Butte County or Northern California market. Very promising and potentially productive businesses are hidden away in households, and garages that are potentially a source of economic and psychological reward for the entrepreneur and resource to the Town. These business resources should be provided with a formal outlet for publicity and merchandising.

Policy

Encourage the marketing of goods and services produced by home business and industry through formal Town and business sector publicity and retailing programs.

Programs

-Establish a Paradise Home Business Trade Center located within the lower Skyway commercial center to promote the products and services of Paradise home business and industry.

-Work with the Paradise Economic Development Commission and the Chamber of Commerce to produce a Paradise Goods and Services bulletin featuring home business for distribution.

One of the most serious problems confronting business in the CBD is the lack of adequate parking (See Circulation Section). One of the clear advantages offered by outlying commercial centers is abundant parking. The central business district cannot expect any degree of economic resurgence unless it resolves the problem of limited parking facilities. The Town and local business must work together to increase the number of and access to parking facilities within the CBD.

Policy

Work to increase the availability of parking within the central business district and adjacent to downtown business.

Programs

-Acquire vacant property or deteriorated buildings and use the property, in appropriate locations for public parking facilities.

-Work with business owners to improve and expand the amount of parking available on existing commercial lots.

7.472 Outlying Commercial Shopping Centers

The recommendation for community and neighborhood serving shopping centers is that they be limited in number and distribution. It is recommended that centers be concentrated at a few places and that they be larger in scale or in number of businesses.

The Citizen's Attitude Survey showed a clear preference by the people of Paradise for businesses to be concentrated in a few centers (54.3%) or to be restricted to a few principal streets (27.6%).

Outlying centers which already exist are at Clark and Pearson and Clark and Wagstaff. Potential development could take place at Clark and Elliott, Clark and Bille, and Skyway and Wagstaff.

There are drawbacks to the crosstown intersections at Skyway, however. Site factors are poor. The lots are small, net leachable area is not adequate, and assembly of the many parcels would be expensive. The sites at the cross-town intersections at Clark are favorable on those basis, however. Major constraints to development of additional shopping centers are not due to economic locational factors. Those factors are reasonably favorable. The sites are adequate, the environment may be somewhat safeguarded and access to the Town and market is excellent via major arterials.

The most serious constraints to developing the two intersections (Elliott and Bille) along Clark Road are the cumulative impacts of potentially four large scale shopping centers within the space of 1.56 miles along Clark Road. The impacts are environmental, circulation, and economic. Environmentally, the amount of sewerage disposal would pollute the ground water and drainage ways, excessive surface cover and adjacent land erosion would occur, the continuous lighting would create a substantial glare over the Town, and significant vegetative cover would be lost due to development and inducement to additional strip development.

The circulation system would be seriously impacted. Four lanes of traffic would be choked with vehicles to serve the centers. Emissions would be very

high, noise generation excessive, accident rates very high, and there would be constant psychological pressures caused by congestion.

These are excellent reasons not to allow commercial development at both remaining intersections along Clark Road. The intersection of Clark and Elliott, however, is at the end of an existing commercial extension of shopping developments north of Pearson Road. Also, the Elliott Road intersection is very near much higher density housing especially the evolving multi-family corridors along Elliott and Nunneley. Shopping center development there would entail relocation of an existing market and therefore not adversely affect remaining business.

Policy

Commercial development should be allowed only in areas where business concentrations already exist.

New commercial development should be encouraged to locate in the downtown area in order to deter blighting there.

Commercial developments should be encouraged in areas where high population concentrations exist so as to encourage less vehicular use and more pedestrian access.

7.5 MANUFACTURING LAND USE

7.51 Existing Industry

Paradise is not a manufacturing town. There is little historic precedent, substantial resource basis or locational advantages to stimulate its location in the Town. Manufacturing in Paradise is in some way related to the Town's agricultural history, to the enterprise of local residents or more recently to certain amenity advantages of the ridge environment. These advantages attract light manufacturing investors or those coming to reside who bring with them entrepreneurial talent for production.

This climate for residence and economic activity produces a type of creative industry in Paradise. Most production in the Town is small or very moderate scale in nature. No heavy industry exists. The largest industries include fruit juice processing, modular home construction, concrete manufacture, publishing and printing, and few others. Small scale creative industrial operations on the other hand are relatively numerous. There are about 60 such establishments in Paradise.

A sample survey of small scale Paradise manufacturers found basically four types of products. They include, in order of decreasing frequency, wood products, agriculture and food products, publishing and printing, and metal and plastic products. Wood products, including cabinetry, accounted for 37% of small scale

industry; publishing and printing, 25%; food products, 18%; metals and plastics, 15%; and others, 5%.

Most of the small scale manufacturing in Paradise would be classified as small shop type activity. Only about 15 percent of the manufacturing was found to be carried on within the home, that is, identified as true "cottage industry." Nevertheless, that is a substantial amount and a larger percentage than would be expected. Cottage industry did not predominate in any of groups listed above.

7.52 Location of Manufacturing

Medium scale manufacturing is located in three primary areas of the Town. Lower Clark Road between Buschmann and the golf course, the lower Clark Road industrial park below the golf course, and at several locations on the upper Skyway. Small scale manufacturing, on the other hand, is not collected at particular places. It can be found generally along, or near principal arteries like the Skyway, Bille, and Pearson. Many others are located on collector and local streets throughout the Town. This is generally due to the fact that they were established under flexible Butte County zoning, non-rigorous enforcement of use restrictions, and liberal issuance of special use permits. Many are now non-conforming uses in lesser intensity use zones.

The dispersed character of these small scale manufacturers is reminiscent of the pattern of home industry during the industrial revolution and reflects the same natural outgrowth of innovation among residents of a community. The dispersal of a healthy phenomena so long as negative impacts are not created for the neighbors of those uses.

7.53 Plan for Manufacturing Uses

It is recommended that the development of manufacturing be carefully monitored by the Town to discourage the impacts caused by unplanned or indiscriminate project approval. At the same time manufacturing development possessing beneficial characteristics for employment and support of the economy providing outlet for the energies and talents of citizens be encouraged. Some fundamental recommendations can be made outright.

Policy

Heavy manufacturing should not be allowed in Paradise.

Medium manufacturing which generates noise, vibration, smoke, fumes, dust, environmental hazard or hazard to workers should not be permitted in Paradise.

Promote manufacturing which involves electrical, plastic, wood or computer parts assembly with approval given only after careful environmental review of community impacts.

All applications for manufacturing uses should be required to receive approval of site plan, building design, signs, lights, and use of natural landscaping materials.

The location of manufacturing is generally the most sensitive issue and is the basis for concern about community impacts. It is recommended that the following policies direct the siting of medium scale manufacturing.

Policy

Industrial areas should be limited and separate from the residential and commercial areas and generally peripheral to the Town.

Specific industrial areas should be identified and the types of industry desired should be defined.

Programs

-Designate an expansion of the present industrial district on lower Clark at Easy Street and McKale Road to the north to the eastward curve of Clark Road and to the south along the remaining portion of level terrain. The district should be designated Light Manufacturing and subject to performance criteria for a project approval.

-Investigate acquisition of the airport south on Clark Road or at some other site for Town purposes including designation of adjacent properties as Light Manufacturing. Annex related surrounding property and easements along Clark Road to the Town.

-Undertake to prepare sites and lots of appropriate size required by investors.

-Charge the Town Economic Development Commission in consultation with the Planning Commission to develop a list of industrial types which would be desirable for Paradise.

Policy

Additional medium scale manufacturing development along the Skyway and other traffic arterials, outside of lower Clark Road, should not be allowed.

Due to the nature of small scale manufacturing and its need for careful nurture by individuals in a home environment or due to the marginal economics of start-up, a separate policy should apply.

Policy

Small scale manufacturing should be permitted in the Town so long as it meets the performance criteria given for home business and industry.

7.54 Supplemental Land Use Policies

Building heights should be limited to two stories above street level.

Lighting in commercial and recreational areas should be designed and constructed to reflect light downward and prevent any lateral or upward glare.

All development should be aesthetically consistent to the rural atmosphere.

All new buildings should have land set aside for landscaping to maintain the aesthetics of Paradise.

Residential Policies

Provide a distinct separation between residential and non-residential land use through the use of zoning major streets, natural drainage courses, and appropriate site design features.

Develop residential areas as safe, stable, and attractive neighborhoods in which to live.

Encourage development of residential areas that are attractive both from within and without through a continuing program of civic beautification, maintenance of homes and streets, and other measures which will promote an aesthetically desirable environment.

All residential lots should be designed to maintain the open space character of the Town and to support an adequate waste disposal field.

Population densities should be guided by consideration of topography, vegetative cover, access to transportation and service facilities, and other factors such as drainage and soil conditions.

The highest residential densities should be located on relatively level land. Population density should decrease as steepness of terrain increases.

Redevelopment and rehabilitation should be employed to correct deficiencies of blighted or deteriorating areas.

Environmental Policies

There should be a minimum amount of land area left undeveloped to maximize water absorption by the land.

There should be setback standards from all canyons for aesthetics and to minimize hazards.

No waste or fill should be dumped into streams or canyons.

There should be no land stripping of mountains or other lands without a special permit.

Agriculture Policies

Explore measures to maintain and preserve the remaining agricultural land in Paradise for the value to the economy, open space, and historical basis of the Town.

Programs

-Investigate use of the California Land Conservation and Preservation Act for orchard, vineyard, truck garden, and grazing land protection.

-Evaluate the use of local covenants to allow preferential taxation of agricultural land in exchange for agreement to retain agricultural use.

Policies

Vacant land should be considered for use as community gardens.

Agricultural land which permits the economic support of livestock and agriculture should be maintained in order to offer land-owners a productive alternative to subdivision.

Livestock zones should be defined by setting health and safety standards.

7.6 CIRCULATION

Movement of persons and vehicles throughout the community is one of the most important facets of a human settlement system. Being able to move safely and as quickly as possible between home, work, shopping, public, and other destinations is a right which must be accommodated by planning and engineering to meet existing and forecasted demands for movement. At the same time, planning and engineering must order the use of land to minimize total vehicular movement.

In Paradise, the overwhelming mode of movements is by private roadway vehicle. Pedestrian systems are subordinated to traffic design and very little or no use is made of public transit, rail or air transportation.

Paradise presently has about 85 miles of paved public roads and an estimated 280 miles of private, largely non-paved roads and lanes. Almost one quarter of the area of the Town (23.5% or 2720 acres) is taken up by streets and lanes.

7.61 Streets and Lanes

There are seven major arterials which serve to move traffic across town at the highest volumes and speeds. The north-south arterials, the Skyway, and Clark Road carry the highest volumes of traffic and the remaining arterials north-south, Pentz Road and east-west, Bille and Wagstaff Roads carry lesser amounts.

Traffic loads have been measured at the entrance to each of the inter-sections of these arterials. Butte County compiled counts from 1955 until 1977 and Skyway and Clark Road intersection counts were updated by a Municipal Advisory Committee research group in 1979. Average daily traffic passing through an intersection for selected periods in time is given in Table VII-9.

Until 1977, the intersections which were most busiest were Skyway at Pearson and at Elliott. In 1977, traffic at Skyway and Bille approached levels of the intersections to the south. This was due to large increases in popu-lation north of downtown Paradise. During this time, traffic at the Clark and Pearson intersection was rising to the levels found on the Skyway.

TABLE VII-9
Average Daily Intersection Traffic 1970 - 1979

Intersection	1970	1973	1975	1977	1979
Skyway at					
Neal	4337	6602	N/A	7116	9988
Pearson	7132	9829	N/A	9830	14942
Elliott	7854	10103	N/A	11339	22126
Bille	4731	7157	N/A	9221	13887
Wagstaff	1948	3176	N/A	5451	9412
Clark	1701	2258	2876	4686	N/A
Pentz	1440	2101	1980	4144	N/A
Clark at					
Pearson	5204	5924	6791	N/A	16566
Elliott	3417	4786	4962	7810	13188
Bille	3264	3489	4359	6572	12183
Wagstaff	2012	2431	2877	4790	10997
Pentz at					
Pearson	1442	1780	2429	3100	N/A
Bille	1766	2170	2698	3673	N/A

In 1979, the Skyway/Elliott intersection continued to generate heavy use. The traffic flows on Clark Road at Pearson, Elliott, and Bille rose to levels roughly equal to those along Skyway. This dramatic increase was due to increasing population to the north and east of downtown, the relative lack of congestion along Clark Road as opposed to Skyway and the increasing attractiveness of shopping along Clark Road. Although no current traffic counts have been com-piled, it is probable that in 1980 Clark Road intersections between Pearson and Wagstaff carry more vehicular load than any other except Skyway at Elliott.

Presently the arterial road system in Paradise is adequate to handle the level and distribution of flows. The condition of the arterials is good as many surfaces and paving have been recently completed. However, as flows and

rates of deterioration begin to increase, the Town will require increasing expenditures to upgrade the road systems. Recommendations for the arterial and sub-arterial systems are provided later.

The collector and local streets systems have not been quantitatively evaluated. Collector streets, such as Nunneley, Sawmill, Libby, and Foster Roads, etc., serve most of the local or residential streets. They were designed and are maintained to handle an amount of automobile traffic consistent with the residential areas around them. They are not intended for through traffic.

Collector streets were well maintained before incorporation. They are not prone to deterioration as rapidly as arterial streets due to the nature of traffic using them and also because they generally serve areas which are nearly completely developed and little increase in traffic has occurred or can be expected.

The local streets system in Paradise is characterized substantially by modern paved public and private roads and lanes but is dominated by largely unpaved, semi-improved private lanes and ways. The unimproved streets are, by design, intended to preserve a rural character in much of the Town. Traffic volume on these lanes is minimal, as they generally are not through streets, and speeds are very low. Maintenance is performed by abutting residents or not all.

The condition of private lanes varies considerably and trafficability is often reduced in bad weather. The lanes have improvised designs and grades and there is little consistency in these features.

Other than periodic nuisance to the abutting residents the most serious problem with private lanes is the safe and feasible negotiation by emergency services equipment. Although urban road standards would satisfy that margin, a lesser design standard would be appreciated.

7.62 Proposals for Streets and Lanes

The Town of Paradise, through incorporation, assumed a significant public works planning and maintenance responsibility for streets and roadways. That responsibility will increase with time and require increasing inputs of administrative, planning, and fiscal resources. The Town must move in directions that will ensure the efficient and effective provision of these services. Recommendations for streets and lanes follow:

Policies

Establish the necessary administrative, planning, and budgetary framework to meet the public works and capital needs of the Town's system of streets and roads.

Study and plan for the necessary physical improvements to the Town street and roadway system.

Do not permit additional traffic lanes to be added to roads other than Clark and Skyway in order to preserve the rural character of the Town road system.

Require that adequate access and utilities, including safe sewerage disposal, be provided in residential and other developments.

Through traffic within residential neighborhoods should be discouraged.

Programs

-Adopt the revised capital improvement budget and 5-year program submitted to the Town Council.

-Plan and administer a program of streets and highways improvements and maintenance and prepare or coordinate the preparation of the annual public works budget, Town capital improvements and plan and necessary engineering, planning or environmental, research necessary for the Town circulation system.

-Contract for a comprehensive traffic engineering survey to determine traffic needs, projections, and requirements for roadway speeds, lighting, truck traffic, signing, pedestrian interaction with the system, marking, access, parking, etc.

-Improve north-south and crosstown public access to improve emergency services responses and reduce trip distance and energy consumption.

-Improve crosstown access to Feather River Hospital.

Roadway Extension Programs

- Extend Buschmann Road west to the Skyway
- Extend Elliott Road to Kibler
- Extend Forest Service Road to the Skyway
- Prepare a feasibility study for the extension of Bader Mine Road to the Skyway at a point west of the Magalia Reservoir.

Roadway Widening Programs

- Widen Clark Road to four lanes between Bille and Wagstaff Roads.
- Widen to four lanes Skyway from Wagstaff to north Town limits.

Programs

-Adopt a set of rural road width standards for all access roads. Encourage 20 feet minimum cleared access (16-foot minimum for flag lots) to allow fire equipment maneuvering.

- Establish a maximum allowable grade on private roads.
- Establish a minimum allowable curve radius on private roads.
- Maximize access to undeveloped and remote lots and inhabited structures by requiring subdividers to provide deeded access to adjacent undeveloped property where appropriate.
- Require appropriate drainage provisions on all private access roads.
- Prepare an ordinance to regulate the location of private easements.

7.63 Safety

The Town circulation system has evolved over a long period of time under rapidly increasing intensity of use. Standards which were applied formally by government or informally by landowners may not currently be effective or sufficient to handle increased traffic volumes, speeds or safety considerations. However, certain aspects of the street and roadway system are unique and typify the rural road system that have given Paradise a delightful environment. The preservation of these environmental qualities while at the same time improving the safe use of Town roads are two objectives which can be achieved simultaneously.

Policies

Allow resurfacing and moderate road widening or straightening as necessary to provide transit safety and in each case require shoulder widening to provide safe pedestrian or cyclist use of the roadway.

Natural and landscaped vegetation should be cleared when it obstructs safe visibility at intersections or road curves.

Natural and landscaped vegetation should be preserved along roads whenever possible to maintain the wooded character of the Town.

Accident levels at major intersections in Paradise are roughly correlated with the relative traffic intensity of the intersection. The highest accident report levels occur at Skyway and Elliott, 5-8 per year, followed by Clark at Pearson, Elliott and Bille, 4-7 per year, and then Skyway at Clark and Pentz Roads, 5-6 accidents per year each.

Accident counts were tallied for all intersections and an interesting trend could be noted. There is not a strong correlation between the year of record (and consequently the level of traffic) and the number of accidents. (See accident count in Appendix D.) As traffic levels increase at intersections there seems to be a consequential decrease in accident rate. The exception

seems to be at the Skyway intersection with Clark and Pentz. These accident rates have increased substantially.

Program

-Improve approaches, signing, and enforcement at the intersections of the Town's major north-south arteries, Skyway, Clark, and Pentz Roads.

7.64 Pedestrian Systems

As a foothill community Paradise has attracted a class of residents who are much more prone to spend time outdoors driving, biking, walking, and enjoying the pine forest scenery. The streets and roads of Paradise today are unsafe for pedestrians and cyclists. No space is provided to separate vehicular from non-vehicular traffic and the use of the same spaces is hazardous. At a time when the cost of motor vehicle operation is becoming prohibitively expensive, especially for the large proportion of fixed income residents, the need for a pedestrian and cyclist option is great.

Last year the Town organized a committee to review the problems and recommend solutions for the provision of such spaces for pedestrian and cyclist use. The Curb, Gutter, and Sidewalk Committee established as its purpose, and the Plan establishes as a goal:

GOAL: "...preserve the natural growth along side the streets and roads in the Town of Paradise...and provide facilities for the safe use by pedestrians and vehicles...preserving as many trees and shrubs possible by locating sidewalks and walk areas in keeping with the natural contour of the land and separate from vehicle traffic."

Policy

It shall continue to be the policy of the Town to avoid formal sidewalks in favor of meandering or unpaved footpaths where possible.

Program

-Specific recommendations for pedestrian and cyclist paths are provided in the Committee proposal. The Plan recommendation supports its proposal for curbs, gutters, and sidewalks along Clark Road and the Skyway and asphalt walkways or pathways on all major crosstown arterials and subarterials. Also, the Plan supports Committee recommendations for pathways in new subdivisions of single or multifamily neighborhoods and along any new roadways or extensions.

The General Plan further recommends auxilliary systems for pedestrians, i.e. covered walkways, benches, and protected crosswalks in the area of the Central Business District. These proposals are included in the commercial land use section of the Plan.

-Pedestrian crosswalks should be provided at all major intersections in the Town.

7.65 Public Transit

In Paradise a large percentage of citizens have no personal transportation. They must rely on friends or some form of social assistance transportation. The availability of public transit is ad hoc in Paradise. A non-coordinated plethora of agencies provide limited and almost wholly non-scheduled services which are often too much trouble or inconvenient to those persons who need the service.

A transit needs assessment was prepared by Butte County and CalTrans in 1979 which outlines the needs of Paradise. The Town has a higher percentage of its total population potentially dependent on public transit than any other area. Over 43% of the population fits this description. Thirty-three percent of Paradise households indicated that they felt a real need for public transit. In the Citizen's Attitude Survey conducted in February 1981, over 55% of responding households indicated they would use a local bus transit system, if established.

More than 20 regional agencies provide some form of periodic transportation services in Paradise. The services upon which most ridge transit riders rely are the newly created Butte County Transit, Greyhound Bus, Butte College Bus, Paradise Unified School District, Woodall's Taxi Service, the Paradise Express, and the Paradise Ambulance Service.

The first three services are mainly inter-city links providing for out-of-town trips. These are generally one time, special purpose trips. Excluding the Butte County Transit, the schedules are for infrequent departures and returns and stops are not well known. The school district offers service only for students and the last three are personalized, non-scheduled, limited carriers.

Paradise residents in the 1979 needs assessment listed the types of transit services most desired. They included:

1. Access to taxi services in Chico and Oroville for elderly and handicapped persons.
2. Transportation for the elderly and handicapped in the evenings and on Sunday.
3. Transportation for convalescent patients.
4. Intra-urban (local) transportation for shopping and health centers.

Of these stated needs effective progress has been made only in meeting the demand for County inter-city transport.

Policy

Work to meet the public transit needs identified in the Butte County Transit Needs Assessment and supported by the Citizen's Attitude Survey.

Programs

- Study the feasibility of establishing a local fixed bus system comprised of at least two routes serving Skyway, Clark, and Pentz Roads and Pearson, Elliott, and Wagstaff Roads.

- Consider expansion of existing Paradise Express or dial-a-ride service to evenings and weekends.

7.66 Truck Traffic

The Skyway, Clark, and Pentz Roads have always been used by logging and other heavy trucks for rapid access to logging areas, the Stirling City mill, and other destinations north of the Town. Neal Road, as a direct route to the County land fill, is also impacted by the daily use of large garbage trucks on a rather narrow residential-use roadway. These trucks move through town at greater than safe speeds causing a great deal of noise, fumes, vibration, and intimidation of local motorists. Trucks now have begun to park along side these major corridors hampering normal traffic flows, blocking sight distance and creating unsightly views for residents. The Town must move to regularize and monitor these practices to preserve the tranquility and safety of its through residential streets.

Policy

Adopt programs to limit the routing, weight, and speed of heavy trucks moving through Paradise.

Programs

- Establish a through town and cross town truck route.
- Prohibit vehicular parking along Pentz Road.
- Limit truck parking to off-street locations.

7.67 Parking

The availability of parking is critical for any type of land use. Subdivision regulations generally insure that adequate parking is provided for any new development. In Paradise the history of effective administration of those regulations is relatively short and therefore many land uses, especially commercial and industrial uses, have less space than necessary for parking.

Parking is classified as on-street (on the street itself) or off-street (in a parking lot or space within the property). On-street parking is less desirable for residence or business because less total space is available, entering and leaving the vehicle is hazardous due to passing traffic, street cleaning or maintenance is made more difficult, etc. Off-street parking remedies all these problems and provides much more security and convenience for the motorist.

The problem of parking in Paradise is that there is too little off-street parking available for traditional businesses. Sufficient off-street parking exists in newer shopping centers and shopping corridors. Businesses which have long operated in the Central Business District or at outlying street frontage locations along the Skyway, Pearson, and Clark have insufficient parking to make shopping safe and convenient for patrons.

An inventory of existing parking was done along Paradise major roadways. Total estimated on-street and off-street parking was made for block faces between main intersections for purposes of comparison and evaluation. These data appear in Table VII-10.

The total estimated parking in essentially commercial corridors is 6137 spaces. About 48% of the spaces are within the Skyway commercial corridor between Neal and Wagstaff Roads.

Of the total spaces only 1215 (20%) are on-street parking. The Town average for off-street parking, then, is 80% of all parking spaces.

With an understanding of the disadvantages of on-street parking, a tally of all distinct shopping districts was done to determine how each compared with the average of 80 percent. Areas above the average are likely to be more attractive to shoppers or centers of transaction than those below the average. This is only in terms of parking convenience and the related host of problems. Referring to shopping districts in Table VII-10, these higher to lowest ranked areas are given in Table VII-11.

These data show that the shopping center at Clark and Wagstaff provides the most ample and possibly most convenient parking facilities while strip development typified by upper Skyway and middle Clark and the poorly designed commercial facilities (including the Post Office) on Almond Street provide the least ample and possibly least convenient parking. The CBD falls below the average and parking problems there are a common complaint of shoppers and merchants.

The data imply that more concentrated shopping facilities are better able to provide more off-street parking. This supports the recommendations of the commercial land use section for improvement of off-street parking in concentration areas like the central business district.

TABLE VII-10
PARADISE PARKING 1981

Shopping Location	Street Segment	#On-Street Spaces	#Off-Street Spaces	%Off-Street Spaces
Skyway between:				
<u>Lower Skyway</u>	Neal & Black Olive	46	460	85%
	Black Olive & Oakwood	36	36	
	Oakwood & Pearson	16	70	
<u>CBD</u>	Pearson & Honeyrun	17	80	78%
	Honeyrun & Foster	13	48	
	Foster & Fir	21	0	
	Fir & Boquest	16	50	
	Boquest & Elliott	40	200	
<u>Skyway Shopping Ctr.</u>	Elliott & Oliver	50	320	87%
	Oliver & Center	15	258	
	Center & Bille	155	875	
<u>Upper Skyway</u>	Bille & Wagstaff	55	100	65%
Clark Road between:				
<u>Clark/Pearson Center</u>	Buschmann & Pearson	40	240	81%
	Pearson & Elliott	100	370	
<u>Middle Clark</u>	Elliott & Bille	350	230	40%
	Bille & Wagstaff	75	850	92%
Pearson Road between:				
	Skyway & Clark	120	685	85%
Almond Street between:				
	Pearson & Fir	50	100	50%

TABLE VII-11
PERCENT OFF-STREET PARKING BY SHOPPING AREA

Upper Clark	92%	80% Average
Skyway Shopping Center	87%	
Pearson	85%	
Lower Skyway	85%	
Clark/Pearson	81%	
CBD	78%	
Upper Skyway	65%	
Almond Street	50%	
Middle Clark	40%	

Policies for parking have been specified in proposals for commercial land use, especially those focused on CBD revitalization. They include acquisition of vacant or under-used parcels for public parking and a government/merchant program of providing better use of on-site space to create more parking adjacent to or behind buildings.

7.68 Paradise Sky Park

The Paradise airport located south of the Town on the west edge of Clark Road is recorded by the Federal Aviation Administration, but the facility is very small and not served by scheduled service. It covers a 35 acre tract and includes a 20-foot-wide and 1565-foot-long runway, limited maintenance facilities and tie down space for 30 aircraft. The runway size limits traffic to single engine aircraft. It is therefore classified as a utility airport with limited commercial or transportation service use.

There is a potential to widen the runway and extend it to 4000 feet. With this improvement and lighting and radio control facilities, the airport might provide a very useful asset to the Town. It would permit open use in a foothill location when heavy winter season fog closes valley airports. It might provide the core for an industrial district and certainly provide the convenient air transport facility for Town business and citizens.

The recommendation is that the Town examine the feasibility of acquisition and the cost of improvements. A detailed cost benefit analysis should be prepared before acquisition is approved. These recommendations are included in the industrial land use section of the Plan.

7.69 Additional Circulation Policies & Programs

Acquire and maintain the Southern Pacific right-of-way from Neal Road to the north Town limit for exclusive use as a natural recreational corridor.

Adopt as policy and implement the recommendations of Curb, Gutter, and Sidewalk Committee regarding provisions of public walkways along major roadways.

Study the means of forming assessment districts for provision of walkways at appropriate locations.

Require that developers provide space along frontages to permit safe pedestrian movement.

Improve emergency vehicle access to citizens in undeveloped areas.

Prepare a detailed traffic, circulation, and parking plan to eliminate congestion and facilitate commercial area parking; accident control and traffic enforcement.

7.7 WATER, SEWER AND DRAINAGE

7.71 Water

The Paradise Irrigation District was established in 1916 serving approximately 11,250 acres and a population of 1,000 people. The PID Board of Directors maintains the need to first establish a stable and sufficient water supply source that would be adequate to supply the industrial, commercial, and residential sectors within the PID boundaries before expanding into new areas and population.

Initially the PID developed the 1,950 acre-feet of usable capacity in the Magalia Dam Reservoir. However, in 1956 an additional 6,400 acre-feet became available when the Paradise Reservoir was completed, bringing the total usable capacity of water stored to 8,350 acre-feet. In 1975-1976 the Paradise Dam was raised an additional 24.5 feet, increasing its available storage to 11,500 acre-feet (an 80% increase) and the District's total capacity to 14,140 acre-feet, a total capacity increase of 69 percent. The water is stored on Little Butte Creek north of Paradise Irrigation District boundaries. Water is transported through a transmission main. Distribution lines, booster pumps, and tank reservoirs are located at various pressure zones throughout the service area.

The District is authorized to operate by the California Water Code, Division 11, Section 20,500 to 29,978 derived from the 1897 Irrigation District law. Domestic service officially began in 1964 with a State of California Health Department water supply permit. The PID also has the opportunity to expand into various other areas of operations. These areas include sewage, drainage, electric power, recreation, and flood control. The PID has considered expansion into sewage and hydro-electric generation; however, the sewage project was voted down in a Town election and the hydro-electric generation plan does not yet appear to be cost-effective.

In 1975, the PID adopted a three phase program based on the text "Feasibility Report on Enlarging Paradise Reservoir and Replacing Magalia Dam Outlet Works," by R.C. Harlan and Associates. The proposal included an education program aimed at increasing awareness towards water conservation, raising Paradise Dam by 24.5 feet, an important water supply project to be considered for development in the mid-1980's.

In addition, the State of California (DWR) required the District to rebuild the Paradise Dam spillway in a way that would allow the further raising Paradise Dam should it ever be needed. Most of these elements have already been completed; however, current census and water consumption data shows a

lower water use figure than previously predicted. This may postpone, to a later date, the need to develop additional water sources originally proposed for the mid-1980's.

In addition to population and water consumption data, a visual decrease in agricultural acreage within the PID boundaries may also result in lower annual water consumption for the area. This also lessens the need to pursue additional water sources.

Responding to suggestions that a supplemental ground water supply would lessen the effects of drought conditions such as those experienced in 1976-1977, the District is currently investigating that possibility.

Table VII-12 shows per capita consumption for the Paradise Irrigation District. Population figures for 1980 may need to be adjusted once the 1980 census data has been reviewed.

TABLE VII-12
PER CAPITA CONSUMPTION
(Unadjusted for Commercial Agricultural Uses,
Other Categories of Use, or Losses)

	Annual Production (GAL)	July Population (Est. of Average for Year)	Per Capita Consumption (gpcpd)
1971	2,145,191,000	15,536	378
1972	2,188,205,000	16,390	366
1973	2,489,814,000	17,244	396
1974	2,660,182,600	18,098	403
1975	2,552,215,000	18,978	368
1976	1,840,076,600	20,014	252
1977	640,544,000	21,215(drought year)	83
1978	1,553,182,000	22,488	189
1979	1,883,656,000	23,838*	216
1980	2,026,126,000	25,268*	220

*Estimates are higher than State and Federal Census estimates

Source: Paradise Irrigation District

7.72 Drainage

A Master Storm Drainage Study and Facilities Plan was prepared for Paradise in 1980 by McCain Associates of Chico. The report provides extensive information on the physical characteristics of the study area, planning considerations in relations to drainage runoff, and design considerations involved in the

hydraulic characteristics of the drainage network. A detailed discussion on special considerations such as existing deficiencies, flood zoning, special permit zones, etc., is also presented in the report.

The drainage plan presents comprehensive guidelines to develop a drainage network in the Paradise area. The plan provides a legal basis to collect fees for drainage channel connections, downstream improvements, and system maintenance.

The drainage system is designed to carry an anticipated flow with alternative storm collection basins based on population estimates and land use trends. Land developers are responsible for a site specific drainage design that is compatible with the overall drainage plan.

Water released into stream channels would be held in detention reservoirs located along the flow path. The detention reservoirs would reduce the downstream impacts that may be a result of increased drainage. Concern has been expressed regarding decreased water quality, changes in plant life and insect populations, and potential harm to the fish habitat.

7.73 Sewage

In 1979, a report prepared by James M. Montgomery, consulting engineers, Inc., entitled Butte County Division of Environmental Health, Water Quality Management Plan for Paradise and Magalia was presented evaluating the cumulative impacts resulting from the use of on-site waste water management disposal system. The report discusses study area characteristics, water use and waste loads, analysis of existing waste water facilities, structural waste water management concepts, and community collection, treatment, and disposal concepts.

The report revealed that many portions of the Paradise area are suitable for on-site disposal. However, the areas south of Elliott Road along the Skyway and the areas south of Pearson south of Elliott Road along the Skyway and the areas south of Pearson Road would best benefit from a central waste water management facility.

This report also suggested that seasonally high levels of untreated septic tank effluent contaminating area surface waters will need to be managed either by growth guidelines or by centralized waste water collection facilities. The projected management practices would consist of continued on-site disposal systems, water conservation, water quality management, and the installation of a community leach field fed by a small diameter gravity collection system.

Montgomery, Inc. is presently researching a second level of study into the problem of ground water pollution and the impacts of on-site waste disposal in Paradise. Their report should be completed by late 1982.

Policies

Establish a community septic tank policy to ensure the efficient operation of existing on-site waste disposal systems.

Encourage closer monitoring of leach fields and downstream water courses by the Butte County Department of Environmental Health to maintain a high water quality and avoid threat to the public health.

Require commercial and industrial developers to pay a share (based on lot area) of the future cost of sewer installation.

Require an examination of waste disposal alternatives for all subdivisions, commercial, industrial, and public developments. Building permits for these developments should be conditional upon submission of a waste disposal system plan.

Coordinate sewerage program policies with those of water supply planning. One agency should be designated to control and coordinate the development of both systems.

Investigate alternative waste disposal systems in sewerage disposal problem areas.

Public information and education should be provided for effective and safe waste disposal under conditions in Paradise.

Sewage Disposal Programs

-Embark on a program for provision of a limited arterial corridor sewer system. The system should serve land uses on the lower Skyway and Clark Road below Bille and Wagstaff, respectively, to the southern limits of the Town.

-Prepare a feasibility and cost-revenue study of installation of sewer lines along the Skyway and Clark

-Investigate the feasibility of the use of community absorption fields, settling ponds, and treatment facilities within Town limits.

-Require septic tank inspection, and pumping if necessary, for each on-site waste disposal system at least every 5 years or whenever the building is sold.

7.74 Additional Infrastructure Policies

Water Supply Policies

Study the impacts of continuing development and annexation on local water supply.

Coordinate water conservation programs with water service districts.

Coordinate Town development plans and projected growth with policies set by water service planning agencies for provision of water supply.

Consider the implications of an aggressive annexation policy against policies of non-expansion of water service districts.

Solid Waste Disposal Policies

Encourage recycling and investigate alternatives to solid waste dumps.

Require all waste disposal vehicles passing through the Town will be completely covered and secured.

Explore the possibility of a regional solid waste management program with other county localities to include the use of a Town transfer station.

Hazardous Waste Policies (See also Hazardous Substances Discussion in the Environmental Quality Section)

Monitor all wastes produced by industries and in industrial zones in Paradise and require plans for their disposal.

Monitor the disposal and spillage of petroleum, petroxides, PCB's, and alcohol wastes from service stations, machine shops, and motor vehicle repair shops.

Require inspection of disposal systems and dump stations in travel trailer service centers.

Study the use of through Town road systems by vehicles carrying hazardous waste or hazardous materials and limit such practices.

Drainage Policies

Actively implement the recommendations of the Town drainage study.

Prepare a grading ordinance to apply to all proposals for subdivisions and non-residential development. Include safeguards to private earth moving on a scale that will increase erosion, runoff or diversion of natural drainage (see also Regulatory Devices Section).

Ensure that natural drainageways are maintained and completely unobstructed.

Limit all building or development within drainage corridors.

Require permits for urban activities within or modification of natural drainage channels.

7.8 EMPLOYMENT AND WAGES

The business environment in Paradise is in many ways similar to that of Butte County and the State of California. As a semi-rural mountain community with a large retirement population, however, it is bound to possess many unique labor force traits that would distinguish it from its greater region. To better understand the economic base and business climate of Paradise, a

special business employment and income survey was administered. (See Business Employment Questionnaire in Appendix B.)

Directory listings for 832 businesses were compiled. These businesses were all current to the Spring of 1981 and became the frame from which a sample was drawn to determine business employment and wage characteristics. However, in order to improve the accuracy of the study certain employers were excluded from the list and were contacted separately. All government, education, utilities, and hospital employers were contacted and information was solicited. The remaining 832 businesses were sampled so that roughly 25 percent of them, a significant sample size, were contacted. A total of 214 businesses were telephoned and managers were asked the questions listed on the survey.

The chief purpose of the survey was to determine the number of persons employed in Paradise, their employment category, class, salary, and finally to learn something of perceived business problems.

7.81 Employment

The estimated total employment for Paradise in May 1981, is 4,935. This number of persons work in Paradise, though not all of them are residents. Based on the Citizen's Attitude Survey employment responses it was determined that about 4,010 residents work in Paradise. The remaining Paradise workers, 925 or 18.7 percent of them, commute to Paradise from homes elsewhere. About 1860 resident workers commute to jobs outside the Town, primarily in Chico and Oroville. These data, the 2 to 1 commuting ratio, support the contention that Paradise serves somewhat as a bedroom community.

Of the 4,935 persons who work in Paradise, the largest proportion are employed in retail trade jobs (See Table VII-13). The estimate of 31.2 percent of all employment is twice as high as the next set of classes, i.e., service, finance, insurance and real estate, government/schools, manufacturing and hospitals. The largest single employer is Feather River Hospital with 525 employees.

The notable statistic in the Table is the very high proportion of employees in retail trade and services, almost half of the labor force. This can be explained by the population make-up of the Town. Like a resort town, Paradise has a large group of non-employed persons whose income is derived from some outside source, in this case retirements, pensions, social security, and life-time investments. Large elements of the population do not need to engage in employment but they require a high level of goods and services. Goods and services employment then can stand alone without a large export base employment almost in the way a tourist economy is supported.

TABLE VII-13
EMPLOYMENT PERCENTAGE BY EMPLOYMENT CATEGORY

Employment Category	No. of Employees (Full-Time and Part-Time)	% of Total	Attitude Survey Responses
Utilities	77	1.5%	1.7%
Government/Schools	609	12.4%	9.4%
Hospitals	525	10.6%	10.4%
Construction	128	2.6%	2.7%
Manufacturing	585	11.8%	10.6%
Retail	1,538	31.2%	28.0%
Finance, Real Estate, Insurance	608	12.3%	6.0%
Service	864	17.5%	16.9%
Unclassified			14.3%
TOTAL	<u>4,933</u>		

The great dominance of the retail and services employment sector is made even more striking if it is compared to similar employment classes for Butte County and the State of California (See Table VII-14). Retail employment in Paradise is proportionally almost twice as great as levels in Butte County and California. The Town's relative importance as a retirement and market center is emphasized by the data.

The other large employment category is the public sector, including the schools. Though 12.4 percent of employment may seem high, it is relatively low when compared to Butte County and the State of California. This lower level is due to the recent incorporation of the Town, limited development of a government bureaucracy, and the reliance on government services from Butte County agencies and consultants. From the point of economy of government, the Town is in an enviable position.

Employment in manufacturing is high in Paradise considering that there are few large scale manufacturing employers. The 11.8 percent rate is above the County but below the State levels. It is below the State because of the complete absence of high employee rates in heavy industry found throughout the State. The Town is above the County level because of the high incidence of

home and small shop manufacturing. The presence of this scale of manufacturing in the tradition of early American production is atypical in this era (See Home Industry portion of Commercial Land Use Section).

TABLE VII-14
EMPLOYMENT PERCENTAGE BY EMPLOYMENT CATEGORY

Employment Category	Butte County Employment	California Employment	Paradise Sample Percentage
Utilities	4.9%	5.3%	1.5%
Government/Schools	19.5%	16.4%	12.4%
Hospitals	*	*	10.6%
Construction	3.1%	4.4%	2.6%
Manufacturing	8.5%	19.2%	11.8%
Retail	17.5%	16.3%	31.2%
Service	19.7%	20.4%	17.5%
Other	26.8%	18.0%	12.3%

*Data not available for this category

Other sectors of Paradise employment are just at or below regional averages. Some construction work is done by outside contractors so that the local construction industry does not leave the strength of local economic linkages as is true outside. Utility employment is low because many services are headquartered outside of Paradise, e.g. the telephone company. All of the above employment sector estimates are corroborated by the employment information gathered in the Citizen's Attitude Survey. In most sectors, the Attitude Survey Data was very close to Business and Employment Survey Data. Differences resulted from the fact that the first survey is only resident employees and the second is for all employees including commuters from outside (See Table VII-13).

Unemployment rates in Paradise have not been ascertained for 1980. The 1975 Special Census indicated an unemployment level of 11.8% for Paradise and 16.3% for Butte County. Estimates for Butte County in 1980 prepared by the California Economic Development Department are 10.5%. There should be a corresponding relative drop in the Paradise unemployment rate to 8% or less.

7.82 Wages

The results of the business survey compiled the level of wages that were paid to employees for each employment sector and job class. Only full-time wages were used due to the incompleteness of data for part-time workers. The average weekly wage was computed for all full-time employees by sector in Table VII-15 and by job class in Table VII-16. Wages appear to be highest for government related employees and markedly high for managerial and professional workers in all sectors. Table VII-16 also illustrates the white collar/blue collar breakdown in occupations. The managerial and professional (white collar) jobs account for 17.9% of all employees and blue collar workers account for 72.1%. The disparity in wage levels between the two is large.

A more comprehensive review of wage and income structures for the Town will be provided by the 1980 census. Those data should be adopted as a part of the general plan as soon as they are available.

7.82 Home Business Employment

In the sample of 214 businesses, 40 or 18.7% were identified as home businesses. That is, the business was operated out of the owners dwelling. One quarter of the businesses offered miscellaneous services and another quarter were construction operations. The remaining, in order of decreasing importance, were retail outlets (15%); real estate offices (10%); guest homes and mobilehome park operations (8% each); beauty salons and home manufacturing (5% each); and the remainder including insurance sales, agriculture, and others. The 25% sample of these industries implies that at least 160 such home businesses exist in Paradise. And these are only those which have listed their businesses in the telephone directory. There are probably many incipient and informal businesses operating (See Commercial Land Use Section for recommendations).

TABLE VII-15
AVERAGE WEEKLY WAGE BY EMPLOYMENT CATEGORY

Employment Category	Full-Time Average Weekly Wage
Utilities	\$395
Government	363
Schools	333
Construction	331
Retail	284
Finance, Real Estate, Iqs.	284
Manufacturing	234
Services	152
All Categories	\$323

TABLE VII-16
EMPLOYMENT PERCENTAGE BY JOB CLASSIFICATION

Job Class	Number of Employees	% of Sample	Full-Time Average Weekly Wage
Managerial	426	8.6%	\$470
Professional	952	19.3%	401
Skilled/Trades	2348	47.6%	246
Clerical/Other	1207	24.5%	253
All Classes	4933		

7.84 Business Problems

Another issue raised in the business survey was an assessment of the problems of running a business in Paradise. Only about 17 percent of businesses identified such problems.

Over 36 percent of the businesses having problems identified government regulations, restrictions and requirements as their chief frustration. Twenty percent complained of the great distance to their suppliers, 15 percent were most concerned with lack of adequate parking. The remainder listed loss of customers to other towns, inadequate facilities, inadequate waste disposal and traffic problems.

The businesses surveyed offered solutions to the above problems. Those stating problems with government thought that more leniency or flexibility with ordinances and permits would be appropriate. They wanted more industrial zoning and council support on rezoning. The fourth largest response asked to finish and implement the General Plan. Among the most frequent responses were those suggesting that the Town provide more parking and that suppliers be encouraged to locate in Paradise.

7.85 Business Disposition

The last issue raised in the business survey regarded the potential change in business size or location. Of the 214 businesses sampled, 42 (20%) indicated that they planned relocation and/or expansion. Almost half (45%) planned some sort of expansion, generally less than 20% of their existing space or simply addition of two small office spaces.

Almost an equal number of businesses are planning relocation. Two-thirds of those plan relocation to other places in Paradise. The remaining businesses plan to move to Chico or some other town.

7.9 LAND USE DESIGNATIONS

7.91 Agricultural Residential

Agricultural Residential areas include residential uses characterized by larger parcels and accessory agricultural uses, including raising of livestock and other forms of agricultural production. This designation should be applied to areas which have been established as agricultural in character and to vacant areas suitable by topographical and locational constraints for such use. Densities should not exceed 1.5 dwelling units/acre.

7.92 Town Residential

Town Residential areas include existing neighborhood and planned residential areas with densities generally greater than 1.5 dwelling units/acre. The predominant housing type is single family residential. Single mobilehomes and mobilehome parks with gross densities no greater than 7 dwelling units/acre are also consistent with this designation. Attached structures and cluster housing at densities no greater than 4 units per acre are also permitted where adequate site design characteristics are used to develop projects which are compatible with adjacent uses and overall neighborhood characteristics.

7.93 Multi-Family Residential/Professional

Multi-Family Residential areas include existing multi-family residential sites and planned projects ranging from 5 to 10 dwelling units per acre. Light commercial and professional office uses are also permitted under this designation where site design characteristics and neighborhood impacts are compatible with predominant multi-family residential patterns.

7.94 Town Commercial

The Town Commercial designation is for the full range of commercial uses including retail, wholesale, storage, professional offices, and light industrial activities provided light industrial uses are of a professional office character in terms of impacts upon infrastructure and adjacent uses.

7.95 Public Institutional

Public Institutional uses include hospitals, schools, churches, public utilities, and public buildings, designed to ensure compatibility with adjacent uses.

7.96 Recreational

This designation applies to public and private land devoted to or planned for recreational use. Examples include, but are not limited to, parks, golf courses, playgrounds, ballfields, camping areas, and picnic areas.

7.97 Industrial

This designation applies to land suitable for uses ranging from manufacturing to wholesale (non-retail) commercial activities. Accessory commercial uses, such as restaurants serving industrial areas and heavy-materials-retail trade would also be considered consistent with this land use designation.

7.98 Agricultural/Open Space

This designation is for areas predominantly non-residential in character. Minimum parcel sizes could range from three acres for intensive agricultural production to 40 acres for resource conservation areas.

All of the land use designations are general guidelines for use. The ultimate test of whether a particular proposal is consistent with the designated use for an area, however, is one of compatibility with adjacent uses,

the immediate area, and with long range growth plans for the Town as a whole. Conversely, a project may, on the surface, appear to be consistent with the land use map designation while conflicting with other policies of the Plan.

Section VIII

Regulatory Devices

REGULATORY DEVICES

8.1 Zoning

The fundamental deficiencies with the present zoning ordinance are inherent in the nature of the ordinance. It was borrowed from Butte County and was never intended to serve a mountain community with the unique social and economic characteristics found in Paradise. The Ordinance contains ineffective land use classifications and arbitrary and inconclusive lists of allowable uses and dimensional requirements.

The zoning ordinance includes vestiges of the A-2 classification which was used as a temporary classification almost 30 years ago. The A-2 zone is ill-defined, overly inclusive, does not lend itself to consistent interpretation, and fails to provide a firm set of expectations for landowners within its boundaries.

The chief problem with the A-2 Limited zone is that it permits the most high intensity uses with a use permit. This introduces human discretion into each decision in the zone; discretion that will vary with the individual, the political situation, and the time and circumstances of application.

There are many other classifications in the ordinance adopted from Butte County that do not appear on the Paradise zoning map. They are superfluous to the text of the Town ordinance.

The second major area of ordinance deficiency is that the ordinance was adopted from a model prepared by the State for essentially valley urban and agricultural areas. The designations are largely inappropriate to a forested mountain community. The sensitive and limiting environmental conditions of the foothills require reinterpretation of compatible uses, minimum lot sizes, dimensional requirements, population densities, and special uses of property.

Standards for development contained in existing zoning districts in addition to subdivision and fire codes should be updated and designed to meet the special needs of the forest community. Standards should reflect the low density, open space, and more traditional, rural levels of public works improvements.

There are several alternatives to the present zoning ordinance which will enable the Town to better meet its goal of preserving the living environment and the abundant natural and community resources it enjoys. To continue with the present regulatory policy would not enable the Town to effectively plan and coordinate future development.

Zoning Alternatives

Three levels of revision for the Town zoning ordinance are proposed. The first will require the fewest changes and the third will require the most. In any case, it is recommended that complete recodification of the ordinance be undertaken.

8.11 Alternative I: Clean-Up Ordinance

At the minimum, the Town version of the Butte County zoning ordinance should be recodified to reflect only those zones which are appropriate to Paradise. The 55 zoning districts should be pared down to fewer than 18 for the Paradise incorporated area. These include all districts presently shown on the Town zoning map with one exception. The A-2 Limited zone should be removed from the ordinance and map.

Most of the northeast and southeast areas of the Town are zoned A-2 Limited. The vagueness and lack of planning coordination in these areas make them the first and most critical area of concern. As a minimum measure all A-2 Limited zones should be declared vacated from the Town ordinance and replacement zones overlaid to the areas.

As an interim zoning measure, adjacent zoning districts which provide the maximum restriction on use of land should be designated within the bounds of the present A-2 Limited district.

Under this first alternative, the resulting zoning districts would be carefully reviewed and rewritten to reflect specific uses, environmental restrictions, and lot area requirements. Population densities for the zones should be adjusted to include density limitations in conformance with the Plan's land use designations.

8.12 Alternative II: Ordinance Revision

The second alternative is one which would make major revisions to the zoning districts. The intent is to introduce a series of zoning districts which will be compatible with the foothill environment, the wishes of the citizens for resource conservation, and growth management with more flexibility in fewer zoning classes.

The neighborhood commercial N-C district should be retained for its special purpose status. It allows neighborhood serving uses and should be used only to serve major neighborhood areas remote from central commercial areas, e.g., the use at Nunneley and Sawmill. Also it is a zone which is useful to provide convenience goods for outlying recreation populations, e.g., the use at Pentz and Stearns. The zone should not be used to allow convenience facilities at key intersections where the residential environment would be degraded.

Adjustments must also be made to the multiplicity of residential zones in Paradise. Multi-family districts might be combined. Similarly, mobilehome districts AR-MH and RT-1 include functionally identical purposes and should be combined.

Single family districts include R-1, R-1 A&C, A-R SR, SR-1/2, and SR-1. The first two R-1 districts are distinguishable only in that the A&C zone allows home business. The commercial development element of the Plan recommends that home business be allowed in all residential areas given certain conditions of use. These two districts should become one and home business standards should be applied uniformly. The A-R, SR, SR-1/2, and SR-1 districts provide functionally identical conditions of use, that is, they allow the nurture of livestock and poultry. The standards provided are consistent with the recommendations of the Town Livestock and Poultry Committee. The only real difference between districts is the permissible lot size. Lot size seems an arbitrary distinction since the standards should be effective for any lot dimensions. The three districts should be combined to one, A-R.

Another approach to combining the A-R and SR zones would be through use of the County FR (Foothill Recreation) zone. The zone is appropriate because it provides for home business, the keeping of livestock and poultry and was written to serve the needs of the foothill environment.

8.2 Performance Zoning

The concept of traditional zoning originated in nineteenth century southern Germany. It was first institutionalized in this country in the ordinances of Los Angeles County (1915) and New York City (1916): In both cases, the land use control ordinances were intended to protect residential area values and neighborhood desirability from the impacts and nuisances of business and industry.

The most common objection to zoning was that it limited an individual's right to develop private property in any way he chose. In 1926 the U. S. Supreme Court, in Euclid vs. Ambler Realty, determined that zoning was, in fact, a constitutionally valid exercise of the community's police power. In the same period, the U. S. Department of Commerce prepared model state zoning and planning ordinances. Those model codes were adopted by most states, including California, and although revised and amplified substantially, they are the basis for zoning presently in use.

Traditional zoning is termed "Euclidean." It is based on the creation of geometric zones or districts, each with a certain set of allowable uses and area requirements. These geometric forms cover the Town and create rigid and

discrete blocks with semi-arbitrary allowable uses and area requirements variable only through rezoning, using permit or variance processes. These processes are cumbersome, allow much compromise of the zoning district intent and in a sense, violate the protective nature of the zoning ordinance. These flaws and the problem of inflexibility have led to the search for alternatives which are consistent with the constitutional rights granted to local government. A more flexible alternative termed "performance" zoning was refined in the early 1970's.

The idea of regulation by requiring conformance to certain "performance" standards was practiced as early as 1970. (See Planning Advisory Service Report No. 272, 1971.) Standards were set regulating the water consumption, sewerage discharge, nuisance characteristics and other attributes of industrial use of land. If a proposed industry could meet limits (standards) acceptable to the community, the use would be allowed. For example, a standard for daily water consumption of 1,000 gallons could be imposed. (This would allow a one story building on one-half the lot or a two story building on one-fourth the lot area, etc.) Thus, performance standards are a measure of the performance (characteristics) of a particular use at a place.

Performance standards were extended to zoning ordinances by 1971. Gay Head, Massachusetts and Bucks County, Pennsylvania adopted such regulations. Several general zones were adopted based on fundamental differences in use intensity within the zones, e.g. low intensity uses, medium intensity uses, high intensity uses. A range of uses were allowed in each zone, but the performance standards for uses varied from zone to zone.

Performance standards may be a simple set of roles of standards which can apply to all areas of the Town. This is the approach used in Gay Head, Massachusetts. Performance standards may classify the Town into general zones based on intensities of use as discussed previously. This approach is the one used by Bucks County and its municipalities and also in the town of Bay City, Oregon. Finally, performance standards may be applied to existing zoning districts without altering their geometric form. Only the range of allowable uses and area requirements are changed to reflect the performance criteria.

8.21 Alternative III

The third, and recommended, alternative to the present Paradise zoning is a performance zoning ordinance. The form of performance zoning recommended is the approach used by Bucks County, Pennsylvania and Bay City, Oregon. Intensity zones should be established as in those ordinances. Standards then should be set for each zone to manage characteristics such as floor area ratio, density, water consumption, sewerage disposal, traffic generation,

buffers and screens, noise, signs, runoff, tree cover maintenance, hazard potential, etc.

Proposed standards should be adopted after careful consideration of existing and desired levels of activity practiced in each zone. Examples may be taken from the Bucks County, Bay City and Lake County, Illinois (See Performance Zoning by Lane Kendig, APA Press, 1980).

Performance standards should be set for each district including noise generation, tree coverage, etc. Planning staff should devise them in coordination with a Design Review Committee.

There are other considerations that should be included in the ordinance. These are the treatment of hazard areas and the allowance for some poultry and livestock in residential areas.

In any case, when an area is determined to present a natural hazard to development including fire, flood, erosion, etc., special overlay performance criteria should be applied to the project site. The standards should include fire access, clearance of fuel loads around structures, fire retardant roofs, adequate water pressure or water storage capacity, maximum setback from steep slopes, etc. Developers must meet these conditions before a development could be allowed.

Similarly for flood hazardous areas, a set of criteria would be established. They would include building setback or height above floodways, dry-land access, etc.

An overlay district should be designed to allow certain classes of livestock and poultry within designated zones. For an applicant within a Town-Residential district, for example, certain conditions of his property must apply. Lot size must be at least 1/2 acre, animal enclosures must be setback at least 50 feet from neighboring inhabited dwellings, cleanliness standards must be maintained, a minimum of 8,125 square feet of land must be available for each horse, head of cattle or swine and 2,000 square feet for sheep or goats and a limitation on numbers of roosters. These restrictions would be more lenient for CRR districts and farm animals strictly prohibited in more intensive districts.

8.3 Other Regulatory Devices

There are many other regulatory tools that may be used by the Town to manage its land use and natural resources. While zoning has been the chief tool others can be equally effective. These have all been discussed in other parts of the Plan including:

1. The Subdivision Ordinance
 - Review and recodification with lot, street, and improvement design standards consistent with the needs of Paradise and the requirements of the State Subdivision Map Act.
2. The Environmental Review Process (CEQA)
 - Careful review of projects vis-a-vis the goals and general plan recommendations of the Town.
3. Street Environmental Revision
 - Redraft a set of rural-Town street codes and standards with minimum conditions set by requirements of emergency agencies.
4. Design Review
 - Prepare an ordinance outlining minimum standards for selected commercial, industrial, multi-family, and institutional developments.
 - Establish a Design Review Commission designed to represent a competent non-partisan perspective.
5. Noise Ordinance
 - Adopt a noise ordinance consistent with noise element recommendations and consistent with State Department of Health model ordinance.
6. Fire Hazard Zone Ordinance
 - Adopt the standards proposed in the Hazard section and review, for inclusion, standards set by the County of Butte Division of Forestry Fire Service.
7. Grading Ordinance
 - Adopt standards to regulate cut and fill operations on all development projects. Encourage maximum use of natural terrain gradient and surface with as little disturbance of soil, rock base and vegetation. Disallow any surface scraping or earth movement on surfaces exceeding 25% slope.
8. Capital Improvements Programming
 - The capital improvements program is one of the most important planning tools available to a community. It allows long (5 years) budgetary and financing forecasts of necessary community investments. These investments are frequently essential elements of the land use and circulation planning program for the Town.
9. Fiscal Impact Studies
 - Every major decision by the Town, whether it is a major capital improvement, a major development (residential, commercial or other) or an annexation or purchase should be studied for its fiscal impact on the Town. Careful analysis should be prepared of the immediate and long term direct and indirect costs of the decision.

8.4 Annexation Policies

Some of the major purposes of annexation extend from the reasons for incorporation. Just as Paradise incorporated to achieve local control over local matters, annexation could consolidate the decisions and resources of adjacent areas into a better coordinated, managed, and planned community. The areas north and south of Paradise have common histories, environments, and peoples of similar socio-economic background. A stronger local voice over use and conservation of the environment and over the collection and wise expenditure of tax resources would result from municipal government. Such has been the case in the Town of Paradise.

Reasons for incorporation and annexation, however, must be more specific and measured in terms of the costs and benefits to those affected. In the case of Paradise, it is apparent that a larger share of revenues generated by the people are now returned to them. A resident knows that his tax dollars will be used in his home town and not for some larger area of government. The budget of the Town reflects this solvency and fairer capture of local tax dollars (a fiscal position envied by many other cities in the State).

Annexation of any land adjacent to the Town must be preceded by a sphere of influence study. The Paradise "sphere of influence" is that area around the Town which bears important relationships to the Town due to its proximity. It is the area in which the Town might be expected to grow or exert great social and economic influence. When this sphere is established through study and approval of the Butte County Local Agency Formation Commission (LAFCO), the Town may then petition to annex territory consistent with its "sphere" and with the approval of residents and LAFCO.

- Update the 1979 Governmental Reorganization Study as a part of determining the Town of Paradise sphere of influence.

Annexation Proposals

Due to the substantial changes in population that will occur around Paradise, the consequent alterations in the environment and the social and economic impact of those changes on the Town, it is necessary for local government to adopt a clear and systematic set of policies for proposed annexations.

Upper Ridge Policies

Explore annexation of the upper ridge areas of Magalia and Paradise Pines to bring a higher level of services and regional development and resource planning to Paradise area.

Program

- Explore annexation of all populated areas to the DeSabra reservoir and include the watersheds of the Paradise and Magalia reservoirs.

Lower Ridge Policies

Explore annexation of the Lime Saddle Community Services District to manage its growth and impact on the local and regional environment.

Coordinate any positive move to acquire the Paradise Sky Park airport with annexation proceedings. In so doing include a lower Clark Road scenic corridor to extend between the present Town limits and the airport.

Scenic Corridor Policy

Cooperate with Butte County to review all proposals for urban development along the scenic corridor of the Skyway from the southwest Town limits to the vicinity of P.G.&E. transmission lines. Preserve the corridor as the "Paradise Parkway."

8.5 Staff Review

Many of the issues and applications brought before the Planning Commission require only the application of professional evaluation and interpretation of planning law. These issues require technical or ministerial action only and do not require the discretionary judgment of lay officials. The variance process is one which, under the strict application of the law, could be administered by a qualified staff and would not require discretionary review. (An exception would be in the case of extenuating circumstances in the proposal.)

It is recommended that the variance process and other technical review aspects be left with planning staff for decision. This will lessen the unnecessary aspects of public discussion, the outcome of which is already set by law. Should the applicant find staff decision and/or conditions unacceptable, they would then be appealable to the Commission.

8.6 Citizen Participation and Government Coordination

One of the lessons learned most clearly from deliberations and preparation of the General Plan was that large scale committee citizens input and inter-agency cooperation and coordination was absolutely essential to the success of the effort. Citizen participation is critical to the planning process.

It is important to insure the legitimacy of administrative and legislative decisions which are being made for the people. Citizen participation channels must be kept open to insure continuing legitimacy and accountability of government. It is recommended that the Town appoint temporary citizen advisory committees as issues arise which would benefit from direct citizen participation.

8.7 Area Planning Body

The development or other use of land adjacent to the limits of the Town is of great interest to Paradise. To further cooperative efforts between the Town of Paradise and Butte County in planning for the common good and future trust of area resources, it is recommended that area planning be undertaken. The Town should approach Butte County to establish a joint-area planning body. The body would have the responsibility to coordinate expectations for land use and General Plan policies for the areas of common concern.

Appendicies

APPENDIX A
CITIZENS ATTITUDE SURVEY
PARADISE GENERAL PLAN

sample size- 1424 surveys
16.3% of population

March 1981

1. How many persons in your household are in the following age groups? mean age 45.2 years
Under 20 20.7% 20 to 40 22.1% 40 to 60 17.7% 60 & older 39.5%
Which group do your attitudes best represent? (circle) _____ 2.59 persons/household
2. How many persons in your household are employed in Paradise? 68.3% of Paradise labor force
What are their occupations? 1. see attachment 2. _____
3. How many persons are employed outside of Paradise? 31.7% of Paradise labor force
What are their occupations? 1. see attachment 2. _____
4. How many persons in your household are retired? 36.6% of Paradise population
5. Are any persons physically disabled? Yes _____ No _____ If yes, how many? 7% of population
6. What percentage of your shopping dollar do you estimate you spend outside of Paradise? _____% less than 10% 68.3% 11-20% 11.8% 21-50% 13% 51%+ 6.9%
7. What changes in Paradise would encourage you to do more shopping here? _____
see attachment
8. Would you prefer to see Paradise continue to grow: at a higher rate 1.3%
the present rate 13.4% a limited and managed rate 58% or not at all 27.3%
9. What type of housing is needed most in Paradise? single family 68.9%
mobile homes in parks 9.8% mobile homes on lots 11.2% or multifamily 10%
10. What lot size is best for single family homes? less than $\frac{1}{4}$ acre 14.4%
 $\frac{1}{4}$ - $\frac{1}{2}$ acre 47.9% $\frac{1}{2}$ - $\frac{3}{4}$ acre 24.5% $\frac{3}{4}$ acre or more 13.2%
11. How many multi-family units should be allowed on one acre?
fewer than 6 87% 6-9 10.2% 10 or more 2.8%
12. Should the remaining vacant land in Paradise be developed 12.8% or
should some land be left as open space? 87.2%
13. Would you support Town purchase of open space? yes 66.3% no 30.4% other 3.3%
14. Should businesses in Paradise be spread out through the neighborhoods 18%
restricted to a few principal streets 27.6% or concentrated in a few centers 54.3%
15. Today Paradise has home manufacturing, small shop manufacturing and medium-sized manufacturing plants. In which of these would you prefer to see growth?
home 16.9% small shop 43.8% medium 25.4% none 13.9%
16. How do you think Paradise might improve the appearance of its business streets and business centers? _____
see attachment
17. How might the appearance of new residential developments be improved? _____
see attachment
18. Would you support installation of a sewer system which was limited to only main business streets? yes 57.7% no 35.3% other 7% (many preferred a complete system)
19. Do you favor control of development in areas with problems of flooding or soil erosion? yes 83.8% no 12% other 4.2%
20. Do you favor control over development in areas of high fire hazard?
yes 87.4% no 11.5% other 1.1%

3. erosion 4. flood

Fire retardant roofs	yes	81.1%	no	18.9%
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Removal of flammable brush	yes	86.8%	no	13.2%
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Use of drought or fire resistant plants	yes	59%	no	41%
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Construction of fire breaks	yes	69.4%	no	30.6%
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Any other defenses against fire hazard? see attachment

yes 93.5% no 3.2% other 3.3%

see attachment

see attachment

Rank	the need for them is great (G), moderate (Mo), or minimal (Mi)?			Rank	the need for them is great (G), moderate (Mo), or minimal (Mi)?		
	G	Mo	Mi		G	Mo	Mi
(1)	17.2%			(3)	10.8%		
(2)	11.5%			(4)	10.3%		
(6)	9.9%			(10)	6.1%		
(9)	7.3%			(8)	7.6%		
(7)	9%			(5)	10.2%		

What other facilities would you recommend? see attachment

see attachment

28. Would you use a local bus system if it was established in Paradise? yes 55.3%
no 44.7% If yes, how often? daily 11.3% 2-4 times a week 36.2%
once a week 11% occasionally 41.5%

see attachment

see attachment

see attachment

Citizens Attitude Survey

Free Responses

Question
Number

2 (Paradise Occupations)

Agriculture	less than 1%	Business & Repair Services	8.7%
Construction	10.6%	Personal Services	4.8%
Manufacturing	2.7%	Health Services	10.4%
Utilities & Transport.	1.7%	Education	5.8%
Trade	28%	Professional	3.4%
Finance, Insurance,		Public Administration	3.6%
Real Estate	6%	Other	13.7%

3 (Occupations outside Paradise)

Agriculture	less than 1%	Business & Repair Services	10.4%
Construction	6.7%	Personal Services	1%
Manufacturing	3.1%	Health Services	5.2%
Utilities & Transport.	9.3%	Education	7.8%
Trade	14%	Professional	6.7%
Finance, Insurance,		Public Administration	7.8%
Real Estate	7.8%	Other	19.7%

7 Department Store	38.6%	More Clothing Stores	6.3%
Nothing	13.1%	Higher Quality	5.3%
Lower Prices	8.4%	Shopping Mall	2.8%
More Variety	6.6%	Other	18.9%

16 leave natural	18.3%	provide sidewalks	6.4%
landscape	17%	fix up	6%
sign control	12.8%	uniform architecture	3.9%
clean up	12%	improve lighting	3%
alright as is	8.2%	other	12.4%

17 leave natural	40.8%	decrease density	5.7%
landscape	18.8%	alright as is	2.5%
clean up	9.7%	other	10.7%
improve street design and architecture	6.9%		

22 (Other defenses in order of frequency mentioned)
clean up hazardous materials, practice control burning, fire hazard
education, increase size of fire department, enforce regulations,
provide more water and numerous individual suggestions

24 Sports	14.1%	Senior programs	5.1%
Youth programs	12.5%	Theater	5.1%
Adequate as is	9.6%	Dancing	4.2%
Music/Concerts	7.7%	Art programs	3.5%
Education	5.8%	Other	32.1%

Citizens Attitude Survey

Free Responses (continued)

Question
Number

25	Adequate as is	28.1%	More emergency ambulance	
	Paramedics	18.7%	and police services	8%
	More clinic and hos-		Activate 911	4.7%
	pital facilities	15.4%	Other	16%
	Health education	9.1%		
26	(Other facilities recommended in order of frequency) Skating facility, senior citizen recreation center, gymnasium, hiking trails and numerous individual mentions			
27	Bicycle corridor	34.1%	Equestrian trails	5.5%
	Pedestrian corridor	26.3%	Combined Uses	4.1%
	Auto bypass	14.1%	Leave as is	2.3%
	Parkland	10.8%	Other	2.6%
29	more enforcement	33.8%	stricter fines	5.2%
	more traffic lights	18.9%	adequate as is	1.9%
	control speed	10.8%	public transit	1.3%
	improve roads	10.8%	more police	1%
	more signs	6.2%	other	3%
	restrict limited licenses	5.4%		
30	Post office	31.3%	Hospital	2.8%
	nowhere	25%	Schools	2.2%
	Skyway	20.3%	Banks	2%
	Downtown	9.5%	Others	6.9%
31	keep rural	17.2%	no condominiums	6.8%
	planned growth	13.1%	need sewers	3.6%
	no growth	10%	animal control	3.2%
	restrict growth	7.7%	no road improvements	2.7%
	improve water quality and availability	7.2%	other	28.5%

APPENDIX B

BUSINESS EMPLOYMENT SURVEY

1. Name of Business _____ Product or Service _____

2. Conducted at home _____ or business establishment _____?

3. How many employees are:

Employee Class	Total	(a) Part Time	(b) Salary/Week	(c) Additional
Exec./Mgrs.				
Professionals				
Skilled or trades				
Clerical				
All Others				

(a) How many are part time?

(b) What is an approximate salary/week for them?

(c) How many employees do you expect to add in the next five years in each of the classes mentioned?

4. Do you have any plans for business expansion or relocation? _____

By how much _____ or to where _____

5. Grocery store floor area _____sq.ft.

6. What are the most serious problems of running a business in Paradise? _____

7. What solutions would you suggest? _____

APPENDIX C

See Department of Planning and Community Development
for Financing Programs for Facilities and Land
Acquisition

APPENDIX D

ACCIDENT COUNTS AT VARIOUS INTERSECTIONS IN THE
PARADISE AREA

	(Number of accidents per year)													
Location	1967	68	69	70	71	72	73	74	75	76	77	78	79	1980*
<u>Skyway</u>														
@Neal	1	2	1	0	2	0	0	2	2	2	5	3	3	0
Pearson	0	2	3	3	4	4	2	0	3	5	8	3	3	1
Elliot	3	2	2	6	6	3	6	6	7	8	5	7	7	5
Bille	8	9	4	2	2	5	2	8	5	3	8	6	4	1
Wagstaff	1	1	2	4	1	3	2	4	3	7	3	6	4	2
Clark	0	1	0	1	1	0	0	3	0	0	0	5	6	2
Pentz	2	1	0	1	0	4	1	1	3	0	5	5	5	3
Coutolenc	1	1	2	3	4	2	1	3	1	2	1	3	6	0
Nimshew	1	1	0	0	0	0	0	1	0	0	3	0	0	0
<u>Clark</u>														
@Bushmann	0	0	0	1	0	0	1	0	0	1	1	0	0	0
Pearson	3	0	6	2	2	2	1	3	2	3	9	6	4	4
Elliot	6	1	1	3	5	2	4	2	4	4	12	7	7	3
Bille	5	3	4	4	4	10	5	8	4	2	5	4	5	2
Wagstaff	1	1	2	0	4	3	2	1	4	1	3	3	5	0
<u>Pentz</u>														
@DeMille	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Pearson	0	1	1	0	2	0	1	0	1	1	3	2	0	2
Bille	1	0	1	2	2	0	1	0	1	1	3	2	0	2
<u>Pearson</u>														
@Foster	3	1	1	2	3	3	1	3	2	1	1	2	11	2
<u>Neal</u>														
@Wayland	0	0	0	0	0	0	0	0	0	0	0	0	1	0
<u>Honeyrun</u>														
@Valley View	0	1	0	0	0	0	0	0	0	0	1	0	1	0

*Accident counts through June 30, 1980

Source: Butte County Public Works Department

APPENDIX E

ARCHEOLOGICAL SITES

The following archaeological sites have been identified by various researchers and are currently recorded in the files of the California Archaeological Inventory Information Center located at California State University, Chico.

PENTZ ROAD AREA

<u>Site Designation</u>	<u>Site Type</u>	<u>Elevation</u> (feet above sea level)
But-675	Bedrock Mortar (BRM)	1650
But-674	BRM	1650
But-673	BRM	1480
But-676	BRM	1500
But-677	BRM	1580
But-678	BRM	1520
But-679	BRM	1520
But-680	BRM	1500
But-681	BRM	1500
But-682	Rockwall	1520
But-320	BRM	1400
But-667	Historical	1600
But-266	BRM	2000

LIBBY ROAD AREA

But-447	Village	1680
But-261	BRM	1620

FOSTER ROAD AREA

But-587	Lithic Scatter	1600
But-588	BRM	1560
But-255	BRM	1560

NEAL ROAD AREA

But-256	Village	1300
But-684	BRM	1200
But-686	BRM	1220
But-685	BRM	1140

CENTRAL PARADISE

But-647	BRM, Lithic Scatter	1940
But-260	BRM	2000

WEST-SKYWAY AREA

But-264	BRM	2000
But-263	BRM	1920
But-334	BRM	2000

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